



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO 1510.96A
C 461
1 Mar 96

MARINE CORPS ORDER 1510.96A W/CH 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: INDIVIDUAL TRAINING STANDARDS (ITS) SYSTEM FOR UTILITIES,
OCCUPATIONAL FIELD (OCCFLD) 11

Ref: (a) MCO 1553.1B
(b) MCO 1553.2
(c) MCO 1553.3

Encl: (1) Components of an ITS
(2) ITS Management
(3) Index of Tasks by Training Location, Level of
Training, Sustainment, and Grade to Standard
(4) Common ITS Listing
(5) Training Support
(6) Individual Training Standards for Utilities,
Occupational Field (OccFld) 11

1. Purpose. To publish the ITS System for OccFld 11.

2. Background

a. The references establish the system used to publish all training standards, provide policy, and assign responsibilities for applying the Systems Approach to Training (SAT).

b. ITS's provide a common base of training for all Marines who have the same MOS. They provide the basis for the SAT of all individual training. ITS's are to be used by institutional and unit commanders to determine proficiency of individual Marines, to establish training plans and courses of instruction, and to maintain a progressive and systematic method to monitor training impacts on Individual Career Development Plans.

c. ITS's are derived from Mission Performance Standards which come from combat requirements of the Fleet Marine Forces. Changes to doctrine, force structure, and the introduction of new weapons and equipment will require revision of this Order on a regular basis.

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3. Information

a. ITS's are to be used by institutional and unit commanders to design, develop, conduct, and evaluate their individual training of Marines. Institutional commanders will derive Terminal Learning Objectives (TLO) and Enabling Learning Objectives (ELO) from the tasks and performance steps set forth herein. Task lists reported on Course Descriptive Data (CDD) submissions will consist of task titles contained in this Order. Unit commanders will use the tasks contained in this Order as the basis of individual training in their long-range, short-range, and near-term training plans.

b. The ITS system for OccFld 11 contains the following:

(1) Enclosure (1) contains the components of an ITS.

(2) Enclosure (2) sets forth the ITS management, as it relates to use and maintenance.

(3) Enclosure (3) is an index of tasks by training location, level of training, sustainment, and grade to standard.

(4) Enclosure (4) is a listing of tasks common to two or more MOS's in OccFld 11.

(5) Enclosure (5) lists training support in four categories:

(a) Appendix A, Training Devices, Simulators, and Training Aids.

(b) Appendix B, Training Equipment.

(c) Appendix C, Ammunition, Explosives, and Pyrotechnics.

(d) Appendix D, Training Materials.

(6) Enclosure (6) lists ITS's for each MOS in OccFld 11.

4. Action

a. Commanding General, Marine Corps Combat Development Command (MCCDC)

(1) Ensure that all units and institutions are using this Order to train personnel to the standards required of their grade and MOS.

(2) Ensure that the Marine Corps Institute (MCI) and the Training and Audiovisual Support Centers (TAVSC) provide standardized job aids and other training support requirements to facilitate training in units.

(3) Review, revise, and manage the upkeep of this Order in coordination with FMF Commanders, MOS/OccFld sponsors and with subject matter experts.

(4) Ensure coordination occurs with the Commander, Marine Corps Systems Command (MARCORSYSCOM).

b. Commanding Generals of the Fleet Marine Forces and Supporting Establishment Commands; and Commanders of Separate Organizations not Commanded by a General Officer


(1) Use this Order to implement the SAT process for Utilities training.

(2) Establish managed on-the-job-training (MOJT) programs to train Marines using the tasks to form the basis of initial, sustainment, or refresher training proficiencies in units both for Utilities and command training plans.

5. Submission of Recommendations and Requirements. Recommendations concerning the contents of this Order are invited. Submit recommendations for change and recommended training requirements to the Commanding General, MCCDC (C 461) via the appropriate chain of command.

6. Mobilization. All ITS's in this Order will remain in effect during mobilization.

7. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.


B. B. KNUTSON, JR.
By direction

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Encl: (1) New Page Inserts to MCO 1510.96A

1. Purpose. To transmit new page inserts to the basic Order.
2. Action
 - a. Replace existing Appendix B to Enclosure (6) with the new Appendix B (MOS 1141) to Enclosure (6).
 - b. Add Appendix C (MOS 1142) to Enclosure (6).
 - c. Change Appendices C (MOS 1161), D (MOS 1169), E (MOS 1171), and F (MOS 1181) to Appendices D (MOS 1161), E (MOS 1169), F (MOS 1171), and G (MOS 1181) in Enclosure (6).
3. Summary of Changes. Separate ITS for MOSs 1141 and 1142 are provided as replacement for MOS 1143 ITS.
4. Filing Instructions. This change transmittal will be filed immediately following the signature page of the basic Order.
5. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.
6. Certification. Reviewed and approved this date.


K. T. HOLCOMB
By direction

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COMPONENTS OF AN ITS

1. General. ITS's contain six components; task, condition(s), standard, performance steps, reference(s), and administrative instructions.

2. Alphanumeric System. Each ITS is identified by the MOS followed by a series of numbers which identify the Duty Area, and Task.

a. The MOS is identified by four Arabic numbers. The four numbers are the ones assigned to the MOS in the MCO P1200.7 (MOS Manual). For the UTILITIES OFFICER MOS, the numeric designators would be 1120.x.x.

b. Duty areas are identified by ascending Arabic numerals and are numbered consecutively by MOS. The designator for the first duty area under MOS 1120 would be 1120.1.X.

c. Tasks within a duty area are numbered consecutively. The first task under the first duty area of MOS 1120 is numbered 1120.1.1. The second task under the third duty area of MOS 1120 is numbered 1120.3.2, and so forth.

3. ITS Components

a. Task. The task describes what a Marine has to do. It is a clearly stated, performance oriented action requiring a learned skill. Knowledge or enrichment topics which are required for the performance of a specific task are included in the administrative instructions. This type of information may very well comprise a separate class with its own TLO/ELO, but is not a separate task.

b. Condition(s). The conditions set forth the real world or wartime circumstances in which the tasks are to be performed. This element of an ITS underscores "realism" in training. When resources or safety requirements limit the conditions, this should be stated. It is important to understand that the conditions set forth in this Order are the minimum, and may be adjusted when applicable.

c. Standard. A standard is inviolate. It is not guidance, but a very carefully worded statement which sets the proficiency level expected when the task is performed. The standard should summarize the performance steps.

d. Performance Steps. There must be at least two performance steps for each task. Performance steps specify actions required to fulfill the proficiency established by the standard.

e. Reference(s). Reference(s) are doctrinal publications which provide the authority vested in the performance steps and references. References should be publications which are readily available.

f. Administrative Instructions. Administrative instructions provide the trainer/instructor with special circumstances relating to the ITS such as safety, real world limitations, and knowledge or enrichment topics which may be a prerequisite to successful accomplishment of the ITS.

ENCLOSURE (1)

INDIVIDUAL TRAINING STANDARDS MANAGEMENT

1. ITS Use

a. ITS's form the basis for all individual training in formal schools and units. They are written for all MOSs in order to specify the critical skills required by units of their individual Marines in support of the unit's combat missions as defined in the unit's Mission Essential Task List (METL).

b. Formal school directors are responsible for reviewing all ITSS marked for initial training at the formal school. They must conduct courses of instruction on those ITSS appropriate for their student populations in terms of grade or rank. The task portion of each ITS taught in a given course must appear in the Task List (Item 24) of the CDD for that course. In accordance with SAT, a Program of Instruction (POI) must also be developed.

c. ITS's provide measures of performance that can be used by unit commanders to diagnose individual deficiencies and design training. Noted deficiencies should be scheduled for remediation on training plans or through MOJT, as appropriate.

d. A Marine should continue to receive instruction on ITSS that support his unit's METL. Individual training cannot cease upon graduation from a formal school because formal schools cannot prepare every Marine to serve in every billet. Individuals should be given opportunities in the unit to gain experience and responsibility as quickly as possible.

2. ITS Maintenance

a. A relationship exists between ITSS and the threat to Marine forces. Changes in the threat often trigger corresponding changes in our weapons, equipment, or doctrine which then necessitate producing new or updated training standards. Such action requires a team effort on the part of the operating forces, the formal schools, and staff agencies at both Headquarters, U.S. Marine Corps and the Marine Corps Combat Development Command (MCCDC).

b. ITSS are ultimately validated by unit commanders and school directors. Records of Proceedings (ROP) resulting from Course Content Review Boards (CCRB) conducted by formal schools are particularly well suited for recommending revisions. The ROP should contain a justification for each proposed addition, deletion, or change and should accompany any request to obtain authority to depart from the currently published ITSS. Unit commanders can recommend changes through participation in a school's CCRB or directly via the chain of command. Unless significant changes warrant earlier action, ITS orders are revised and republished on a 4-year cycle.

c. ITS management is a dynamic process involving user maintenance as the key to refining standards to best serve unit missions. ITS users should evaluate whether ITSS support or fail to support an MOS, and ITS components should be examined for realism and pertinence. Users are encouraged to submit recommended changes to published ITSS through the chain of command.

ENCLOSURE (2)

INDEX OF TASKS BY TRAINING LOCATION, LEVEL OF TRAINING, SUSTAINMENT,
AND GRADE TO STANDARD

1. This enclosure identifies where ITS's are taught, Training Location; the Level of Training regarding proficiency, "P" for preliminary, not to standard, and "S" for trained to standard; and the lowest grade required to demonstrate proficiency in each ITS.
2. The Training Location is either Formal School (FS) or MOJT.
3. Sustainment training is always the responsibility of the unit commander. The number in the MOJT column represents the number of months between evaluation or retraining to maintain the proficiency required by the standard.

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|-----------------------------|--|----|--------------|-------|
| MOS 1120, UTILITIES OFFICER | | | | |
| 1120.1.1..... | MANAGE MAINTENANCE ADMINISTRATION | P | S/12 | WO |
| 1120.1.2..... | MANAGE UTILITIES EQUIPMENT MILITARY OCCUPATIONAL SPECIALTY PROGRAM | | S/12 | WO |
| 1120.1.3..... | MANAGE RECORDS AND FORMS | S | 12 | WO |
| 1120.1.4..... | MANAGE PUBLICATIONS | S | 12 | WO |
| 1120.1.5..... | MANAGE UTILITIES EQUIPMENT AVAILABILITY | | S/12 | WO |
| 1120.1.6..... | MANAGE FABRIC REPAIR PROGRAM | P | S/12 | WO |
| 1120.1.7..... | MANAGE UTILITIES EQUIPMENT SECTION SUPPLY SUPPORT PROGRAM | P | S/12 | WO |
| 1120.1.8..... | MANAGE SUPPORT AND TEST EQUIPMENT | P | S/12 | WO |
| 1120.1.9..... | MANAGE PREVENTIVE MAINTENANCE (PM) PROGRAM | S | 12 | WO |
| 1120.1.10..... | MANAGE CORRECTIVE MAINTENANCE (CM) PROGRAM | S | 12 | WO |
| 1120.1.11..... | MANAGE MIMMS-AIS | S | 12 | WO |
| 1120.1.12..... | MANAGE MAINTENANCE RELATED PROGRAMS | P | S/12 | WO |
| 1120.2.1..... | LAY OUT A MAINTENANCE SHOP | | S/12 | WO |
| 1120.3.1..... | MANAGE UTILITIES EQUIPMENT LICENSING PROGRAM | S | 12 | WO |
| 1120.3.2..... | MANAGE UTILITIES SITE RECONNAISSANCE | S | 12 | WO |
| 1120.3.3..... | MANAGE THE EMPLOYMENT OF REFRIGERATION/AIR CONDITIONING SYSTEMS | P | S/12 | WO |
| 1120.3.4..... | MANAGE THE EMPLOYMENT OF MOBILE ELECTRIC POWER GENERATION AND ELECTRICAL DISTRIBUTION SYSTEMS | P | S/12 | WO |
| 1120.3.5..... | MANAGE THE EMPLOYMENT OF WATER PURIFICATION AND DISTRIBUTION SYSTEMS | P | S/12 | WO |
| 1120.3.6..... | MANAGE THE EMPLOYMENT OF HYGIENE/SANITATION SYSTEMS | P | S/12 | WO |
| 1120.3.7..... | MANAGE THE EMBARKATION/TRANSPORTATION OF UTILITIES EQUIPMENT | | S/12 | WO |
| 1120.3.8..... | ASSIST IN THE PREPARATION OF THE ENGINEER PORTIONS OF AN OPERATION ORDER | S | 12 | WO |
| 1120.4.1..... | MANAGE SAFETY PROGRAMS | | S/12 | WO |
| 1120.4.2..... | MANAGE CORROSION AND DETERIORATION CONTROL | | S/12 | WO |
| 1120.4.3..... | MANAGE HAZARDOUS WASTE AND MATERIAL CONTROL PROGRAM | | S/12 | WO |

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|-----------------------|---|----|--------------|-------|
| MOS 1141, ELECTRICIAN | | | | |
| 1141.1.1..... | PARALLEL GENERATOR SETS | S | 12 | PVT |
| 1141.1.2..... | MOUNT/DISMOUNT GENERATOR SET ON TRAILER | | S/12 | PVT |
| 1141.2.1..... | OPERATE FLOODLIGHT SET | S | 12 | PVT |
| 1141.2.2..... | OPERATE GENERATOR SET | S | 12 | PVT |
| 1141.2.3..... | PERFORM GENERATOR SET LOAD TEST | S | 6 | PVT |
| 1141.3.1..... | INVENTORY LIGHT SET | | S/12 | PVT |
| 1141.3.2..... | INVENTORY LINEMAN'S TOOL KIT | | S/12 | PVT |
| 1141.3.3..... | INSPECT INTERIOR ELECTRICAL WIRING SYSTEM | S | 12 | CPL |
| 1141.3.4..... | INSTALL FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | S | 12 | PVT |
| 1141.3.5..... | RECOVER FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | | S/12 | PVT |
| 1141.3.6..... | INSTALL INTERIOR WIRING SYSTEM | S | 12 | CPL |
| 1141.3.7..... | REPAIR FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | S | 12 | PVT |
| 1141.3.8..... | INVENTORY MOBILE ELECTRIC POWER DISTRIBUTION SYSTEM (MEPDIS) | | S/12 | PVT |
| 1141.3.9..... | CONNECT ELECTRIC MOTOR | S | 12 | PVT |
| 1141.3.10..... | INVENTORY UTILITIES EQUIPMENT | | S/12 | CPL |
| 1141.3.11..... | REPAIR INTERIOR ELECTRICAL WIRING SYSTEM | S | 12 | CPL |
| 1141.4.1..... | PERFORM PREVENTIVE MAINTENANCE | S | 12 | PVT |
| 1141.5.1..... | CHANGE FLOODLIGHT SET LAMPS | | S/6 | PVT |
| 1141.6.1..... | PERFORM ELECTRICAL SAFETY TRAINING | P | S/12 | CPL |
| 1141.7.1..... | COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATION LOG AND SERVICE RECORD (NAVMC 10524) | S | 12 | PVT |
| 1141.7.2..... | COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | S | 12 | PVT |
| 1141.7.3..... | COMPLETE EQUIPMENT REPAIR ORDER STOCKAGE LIST (EROSL) (NAVMC 10925) | S | 12 | PVT |
| 1141.7.4..... | COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | S | 12 | PVT |
| 1141.7.5..... | COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D) | P | S/6 | CPL |
| 1141.7.6..... | ANALYZE DAILY PROGRESS REPORT (DPR) | P | S/S | CPL |
| 1141.7.7..... | ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | P | S/12 | CPL |
| 1141.8.1..... | PLAN FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | S | S/6 | CPL |
| 1141.8.2..... | DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM INSTALLATION | P | S/6 | CPL |
| 1141.8.3..... | DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM OPERATION | P | S/6 | CPL |
| 1141.8.4..... | DIRECT INTERIOR WIRING SYSTEM REPAIR | P | S/12 | CPL |
| 1141.8.5..... | DESIGN INTERIOR ELECTRICAL WIRING SYSTEM | S | 12 | CPL |

ENCLOSURE (3)

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|--|---|----|--------------|-------|
| 1141.8.6..... | MONITOR ELECTRICAL LOAD BALANCING | P | S/6 | CPL |
| 1141.8.7..... | CERTIFY DUMMY LOAD OPERATION | P | S/12 | CPL |
| 1141.8.8..... | DIRECT GENERATOR SET OPERATION | P | S/12 | CPL |
| 1141.8.9..... | DIRECT FLOODLIGHT SET INSTALLATION | P | S/12 | CPL |
| MOS 1142, ELECTRICAL EQUIPMENT REPAIR SPECIALIST | | | | |
| 1142.1.1..... | PERFORM LIMITED TECHNICAL INSPECTION (LTI) | S | 12 | PVT |
| 1142.1.2..... | REPAIR FLOODLIGHT SET ELECTRICAL SYSTEM | P | S/12 | PVT |
| 1142.1.3..... | REPAIR GENERATOR SET ELECTRICAL SYSTEM | S | 12 | PVT |
| 1142.1.4..... | REPAIR HYGIENE EQUIPMENT ELECTRICAL SYSTEM | P | S/12 | PVT |
| 1142.1.5..... | REPAIR DUMMY LOAD | P | S/12 | PVT |
| 1142.1.6..... | REPAIR ELECTRICAL MOTORS | S | 12 | PVT |
| 1142.1.7..... | REPAIR MOTOR CONTROL CIRCUITS | S | 12 | PVT |
| 1142.2.1..... | COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATION LOG AND SERVICE RECORD (NAVMC 10524) | S | 12 | PVT |
| 1142.2.2..... | COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | S | 12 | PVT |
| 1142.2.3..... | COMPLETE EQUIPMENT REPAIR ORDER STOCKAGE LIST (EROSL) (NAVMC 10925) | S | 12 | PVT |
| 1142.2.4..... | COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | S | 12 | PVT |
| 1142.3.1..... | MONITOR MARINE CORPS INTEGRATED MAINTENANCE MANAGEMENT SYSTEM-AUTOMATED INFORMATION SYSTEM PROGRAM (MIMMS-AIS) | | S/12 | CPL |
| 1142.3.2..... | DIRECT PREVENTIVE MAINTENANCE PROGRAM | | S/12 | CPL |
| 1142.3.3..... | SUPERVISE CORROSION AND DETERIORATION CONTROL | | S/12 | CPL |
| MOS 1161, REFRIGERATION MECHANIC | | | | |
| 1161.1.1..... | OPERATE AIR CONDITIONER/REFRIGERATION EQUIPMENT | S | 12 | PVT |
| 1161.1.2..... | COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D) | P | S/6 | CPL |
| 1161.1.3..... | OPERATE ICE FLAKE MACHINE | P | S/6 | PVT |
| 1161.2.1..... | PERFORM AIR CONDITIONER/REFRIGERATION EQUIPMENT PREVENTIVE MAINTENANCE | P | S/12 | PFC |
| 1161.3.1..... | DIAGNOSE AIR CONDITIONER/REFRIGERATION UNIT ELECTRICAL SYSTEM | S | 3 | PVT |
| 1161.3.2..... | REPLACE AIR CONDITIONER/REFRIGERATOR UNIT MECHANICAL COMPONENTS | S | 12 | PVT |
| 1161.3.3..... | REPLACE AIR CONDITIONER/REFRIGERATION UNIT ELECTRICAL COMPONENTS | S | 6 | PVT |
| 1161.3.4..... | REPAIR AIR CONDITIONER/REFRIGERATION TUBING | S | 3 | PVT |
| 1161.3.5..... | REPLACE AIR CONDITIONER AIR CIRCULATING SYSTEM | P | S/12 | PVT |
| 1161.3.6..... | CHARGE AIR CONDITIONER/REFRIGERATION UNIT | S | 6 | PVT |

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|---------------------------|---|----|--------------|-------|
| 1161.3.7..... | PERFORM AIR CONDITIONER/REFRIGERATION UNIT LIMITED TECHNICAL INSPECTION LTI | S | 6 | PVT |
| 1161.3.8..... | REPAIR AUTOMOTIVE AIR CONDITIONER | S | S/12 | PVT |
| 1161.3.9..... | REPLACE ICE-CREAM PLANT MECHANICAL COMPONENTS | P | S/12 | PFC |
| 1161.3.10..... | DIAGNOSE ICE FLAKE MACHINE ELECTRICAL SYSTEM | P | S/12 | PVT |
| 1161.3.11..... | REPLACE ICE-CREAM PLANT ELECTRIC MOTORS | P | S/12 | PVT |
| 1161.3.12..... | DIAGNOSE REFRIGERATION UNIT MECHANICAL SYSTEM MALFUNCTION | S | 3 | PVT |
| 1161.3.13..... | REPAIR SMALL MOBILE WATER CHILLER | P | S/12 | PVT |
| 1161.4.1..... | COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATOR LOG AND SERVICE RECORD (NAVMC 10524) | S | 12 | PVT |
| 1161.4.2..... | COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | P | S/12 | PVT |
| 1161.4.3..... | COMPLETE EQUIPMENT REPAIR ORDER STOCK LIST (EROSL) (NAVMC 10925) | P | S/3 | PVT |
| 1161.4.4..... | COMPLETE WORKSHEET FOR PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | S | 6 | PVT |
| 1161.4.5..... | ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | P | S/12 | CPL |
| 1161.4.6..... | REVIEW INSPECTION TAG (NAVMC 1018) | | S/12 | PVT |
| 1161.4.7..... | ANALYZE DAILY PROGRESS REPORT (DRP) | P | S/6 | PVT |
| 1161.5.1..... | SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT INSTALLATION/OPERATION | P | S/12 | CPL |
| 1161.5.2..... | SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT PREVENTIVE MAINTENANCE | P | S/12 | CPL |
| 1161.5.3..... | SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT CORRECTIVE MAINTENANCE | P | S/6 | CPL |
| 1161.5.4..... | SUPERVISE CORROSION AND DETERIORATION CONTROL | | S/12 | CPL |
| 1161.5.5..... | MANAGE HAZARDOUS WASTE AND MATERIAL CONTROL PROGRAM | | S/12 | WO |
| MOS 1169, UTILITIES CHIEF | | | | |
| 1169.1.1..... | DIRECT MAINTENANCE ADMINISTRATION | | S/12 | GYSGT |
| 1169.1.2..... | DIRECT UTILITIES EQUIPMENT MILITARY OCCUPATIONAL SPECIALTY (MOS) TRAINING PROGRAM | | S/12 | GYSGT |
| 1169.1.3..... | DIRECT RECORDS AND FORMS | P | S/12 | GYSGT |
| 1169.1.4..... | DIRECT PUBLICATIONS | P | S/12 | GYSGT |
| 1169.1.5..... | DIRECT UTILITIES EQUIPMENT AVAILABILITY | | S/12 | GYSGT |
| 1169.1.6..... | DIRECT UTILITIES EQUIPMENT SECTION SUPPLY SUPPORT PROGRAM | P | S/12 | GYSGT |
| 1169.1.7..... | DIRECT SUPPORT AND TEST EQUIPMENT | P | S/6 | GYSGT |
| 1169.1.8..... | DIRECT PREVENTIVE MAINTENANCE PROGRAM (PM) | P | S/12 | GYSGT |
| 1169.1.9..... | DIRECT CORRECTIVE MAINTENANCE PROGRAM | P | S/12 | GYSGT |
| 1169.1.10..... | DIRECT MIMMS-AIS | P | S/12 | GYSGT |
| 1169.1.11..... | DIRECT MAINTENANCE RELATED PROGRAMS | P | S/12 | GYSGT |

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|----------------|---|----|--------------|-------|
| 1169.1.12..... | ANALYZE DPR | P | S/6 | GYSGT |
| 1169.2.1..... | DIRECT DUMMY LOAD OPERATION | P | S/12 | GYSGT |
| 1169.2.2..... | DIRECT BARE BASE SHOWER FACILITY INSTALLATION/ OPERATION | P | S/12 | GYSGT |
| 1169.2.3..... | DIRECT FLOODLIGHT SET INSTALLATION/OPERATION | P | S/12 | GYSGT |
| 1169.2.4..... | DIRECT GENERATOR SET OPERATION | P | S/12 | GYSGT |
| 1169.2.S..... | DIRECT RARE BASE LAUNDRY FACILITY INSTALLATION/ OPERATION | P | S/12 | GYSGT |
| 1169.2.6..... | DIRECT REFRIGERATION/AIR CONDITIONING EQUIPMENT INSTALLATION/OPERATION | P | S/12 | GYSGT |
| 1169.2.7..... | DIRECT CAMP SANITATION SYSTEM MAINTENANCE | | S/12 | GYSGT |
| 1169.2.8..... | DIRECT ENVIRONMENTAL PROTECTION REGULATIONS COMPLIANCE | | S/12 | GYSGT |
| 1169.2.9..... | DIRECT PLANNING OF REFRIGERATION/AIR CONDITIONER SYSTEM | S | 12 | GYSGT |
| 1169.2.10..... | DIRECT EQUIPMENT, TOOL SET, AND LIGHT SET INVENTORIES | | S/12 | GYSGT |
| 1169.2.11..... | DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM INSTALLATION/RECOVERY | S | 12 | GYSGT |
| 1169.2.12..... | DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM OPERATION/MAINTENANCE | S | 12 | GYSGT |
| 1169.2.13..... | DIRECT INTERIOR WIRING INSTALLATION | S | 12 | GYSGT |
| 1169.2.14..... | DIRECT PLUMBING REPAIRS | S | 12 | GYSGT |
| 1169.2.15..... | DIRECT PLUMBING SYSTEM INSTALLATION | S | 12 | GYSGT |
| 1169.2.16..... | DIRECT WASTE DISPOSAL/LATRINE SITE CLOSING AND MARKING | | S/12 | GYSGT |
| 1169.2.17..... | DIRECT BARE BASE SHOWER FACILITY PLANNING | S | 12 | GYSGT |
| 1169.2.18..... | DIRECT PREPARATION OF UTILITIES EQUIPMENT FOR TRANSPORTATION | | S/12 | GYSGT |
| 1169.3.1..... | OBSERVE ELECTRICAL LOAD BALANCING | | S/12 | GYSGT |
| 1169.3.2..... | CONDUCT UTILITIES SITE RECONNAISSANCE | | S/12 | GYSGT |
| 1169.4.1..... | ANALYZE CHANGING WATER SUPPLY SITUATION | P | S/12 | GYSGT |
| 1169.4.2..... | PLAN CAMP SANITATION SYSTEM | P | S/6 | GYSGT |
| 1169.4.3..... | DIRECT CAMP SANITATION SYSTEM INSTALLATION | P | S/12 | GYSGT |
| 1169.4.4..... | DIRECT WATER SUPPLY SYSTEM CONSTRUCTION | P | S/12 | GYSGT |
| 1169.4.5..... | ESTABLISH FIELD MAINTENANCE FACILITY | | S/12 | GYSGT |
| 1169.4.6..... | DIRECT FIELD MAINTENANCE FACILITY | | S/12 | GYSGT |
| 1169.4.7..... | DIRECT SAFETY PROGRAM | P | S/12 | GYSGT |
| 1169.4.8..... | DIRECT UNIT TRAINING PROGRAM | | S/12 | GYSGT |
| 1169.4.9..... | ANALYZE NEW EQUIPMENT FOR TRAINING REQUIREMENTS | | S/12 | GYSGT |
| 1169.4.10..... | DIRECT UTILITIES EQUIPMENT EMBARKATION PROGRAM | | S/12 | GYSGT |
| 1169.4.11..... | DIRECT WATER PURIFICATION/STORAGE SYSTEM OPERATION | S | 12 | GYSGT |
| 1169.4.12..... | PLAN FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | S | 12 | GYSGT |

ENCLOSURE (3)

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|--------------------------------------|--|----|--------------|-------|
| 1169.4.13..... | PLAN FIELD LAUNDRY OPERATION | S | 12 | GYSGT |
| 1169.4.14..... | PLAN MOVEMENT OF WATER POINTS | | S/12 | GYSGT |
| 1169.4.15..... | PLAN PLUMBING SYSTEM | S | 12 | GYSGT |
| 1169.4.16..... | PLAN WATER PURIFICATION/STORAGE SYSTEM | S | 12 | GYSGT |
| 1169.4.17..... | PLAN INTERIOR ELECTRICAL WIRING SYSTEM DESIGN | S | 12 | GYSGT |
| 1169.4.18..... | INSPECT INTERIOR ELECTRICAL WIRING SYSTEM | S | 12 | GYSGT |
| 1169.4.19..... | CONDUCT ELECTRICAL SAFETY TRAINING | P | S/12 | GYSGT |
| 1169.4.20..... | PREPARE COST/DATE/EXPENDITURE RECORDS | P | S/12 | GYSGT |
| 1169.4.21..... | REVIEW INSPECTION TAG (NAVMC 1018) | S | 12 | GYSGT |
| 1169.4.22..... | DIRECT REQUISITION OF SHOP SUPPLIES | P | S/12 | GYSGT |
| 1169.4.23..... | SUPERVISE CORROSION AND DETERIORATION CONTROL | | S/12 | GYSGT |
| 1169.4.24..... | ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | P | S/12 | CPL |
| MOS 1171, HYGIENE EQUIPMENT OPERATOR | | | | |
| 1171.1.1..... | SET UP/DISMANTLE WATER TANK | P | S/12 | PVT |
| 1171.1.2..... | INSTALL PLUMBING SYSTEMS | P | S/6 | PVT |
| 1171.1.3..... | SET UP/DISMANTLE SIXCON WATER TANK MODULE | P | S/12 | PVT |
| 1171.1.4..... | SET UP SANITATION FACILITIES | P | S/12 | PVT |
| 1171.1.5..... | OPERATE FORWARD AREA WATER POINT SUPPLY SYSTEM (FAWPSS) | S | 12 | PVT |
| 1171.2.1..... | OPERATE GALLONS PER MINUTE (GPM) PUMPS | P | S/12 | PVT |
| 1171.2.2..... | OPERATE BARE BASE SHOWER FACILITY | S | 6 | PVT |
| 1171.2.3..... | OPERATE LAUNDRY FACILITY | S | 6 | PVT |
| 1171.2.4..... | OPERATE REVERSE OSMOSIS WATER PURIFICATION UNIT (ROWPU) | S | 6 | PVT |
| 1171.2.5..... | OPERATE SMALL MOBILE WATER CHILLER | P | S/6 | PVT |
| 1171.2.6..... | OPERATE MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LMT | S | 6 | PVT |
| 1171.2.7..... | OPERATE DELOUSING UNIT | S | 12 | PVT |
| 1171.2.8..... | OPERATE TACTICAL WATER DISTRIBUTION SYSTEM | S | 12 | PVT |
| 1171.3.1..... | DEVELOP WATER SOURCE | S | 6 | PVT |
| 1171.3.2..... | DEVELOP WATER POINT | S | 6 | PVT |
| 1171.3.3..... | INSPECT WATER POINT | | S/12 | CPL |
| 1171.3.4..... | PERFORM WATER RECONNAISSANCE | S | 12 | PVT |
| 1171.3.5..... | PREPARE WATER DISTRIBUTION SCHEDULES | P | S/6 | CPL |
| 1171.3.6..... | PERFORM CORROSION AND DETERIORATION CONTROL | | S/12 | PVT |
| 1171.4.1..... | PERFORM PUMP PREVENTIVE MAINTENANCE | P | S/12 | PVT |

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|------------------------------------|---|----|--------------|-------|
| 1171.4.2..... | PERFORM SHOWER FACILITY PREVENTIVE MAINTENANCE | P | S/12 | PVT |
| 1171.4.3..... | PERFORM LAUNDRY FACILITY PREVENTIVE MAINTENANCE | P | S/12 | PVT |
| 1171.4.4..... | PERFORM REVERSE OSMOSIS WATER PURIFICATION UNIT PREVENTIVE MAINTENANCE | P | S/12 | PVT |
| 1171.4.5..... | PERFORM SIXCON WATER TANK MODULE PREVENTIVE MAINTENANCE | P | S/12 | PVT |
| 1171.4.6..... | PERFORM MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LIGHTWEIGHT MILITARY TYPE (LMT) PREVENTIVE MAINTENANCE | P | S/12 | PVT |
| 1171.5.1..... | REPAIR GALLONS PER MINUTE (GPM) PUMPS | S | 6 | PVT |
| 1171.5.2..... | DIAGNOSE SHOWER FACILITY MALFUNCTION | S | 6 | PVT |
| 1171.5.3..... | DIAGNOSE LAUNDRY FACILITY MALFUNCTION | S | 6 | PVT |
| 1171.5.4..... | REPAIR PLUMBING SYSTEM | S | 6 | PVT |
| 1171.5.5..... | DIAGNOSE REVERSE OSMOSIS WATER PURIFICATION UNIT MALFUNCTION | S | 12 | PVT |
| 1171.5.6..... | DIAGNOSE SIXCON WATER TANK/PUMP MODULE MALFUNCTION | P | S/12 | PVT |
| 1171.5.7..... | DIAGNOSE SMALL MOBILE WATER CHILLER MALFUNCTION | P | S/12 | PVT |
| 1171.5.8..... | DIAGNOSE MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LIGHTWEIGHT MEDIUM TYPE (LMT) MALFUNCTION | S | 6 | PVT |
| 1171.5.9..... | PERFORM HYGIENE EQUIPMENT LIMITED TECHNICAL INSPECTION (LTI) | S | 6 | PVT |
| 1171.5.10..... | REPAIR SHOWER FACILITY | P | S/6 | PVT |
| 1171.5.11..... | REPAIR LAUNDRY FACILITY | S | 6 | PVT |
| 1171.5.12..... | REPAIR REVERSE OSMOSIS WATER PURIFICATION UNIT | S | 6 | PVT |
| 1171.5.13..... | REPAIR SIXCON WATER TANK/PUMP MODULE | P | S/6 | PVT |
| 1171.5.14..... | REPAIR SMALL MOBILE WATER CHILLER | P | S/6 | PVT |
| 1171.5.15..... | REPAIR 3000 LIGHTWEIGHT MEDIUM TYPE (LMT) WATER PURIFICATION SYSTEM | S | 6 | PVT |
| 1171.6.1..... | COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATOR LOG AND SERVICE RECORD (NAVMC 10524) | S | 6 | CPL |
| 1171.6.2..... | COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | S | 6 | PVT |
| 1171.6.3..... | COMPLETE EQUIPMENT REPAIR ORDER STOCK LIST (EROSL) (NAVMC 10925) | S | 6 | PVT |
| 1171.6.4..... | COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D) | S | 6 | CPL |
| 1171.6.5..... | COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | S | 6 | PVT |
| 1171.6.6..... | ANALYZE DAILY PROGRESS REPORT (DPR) | S | 6 | CPL |
| 1171.6.7..... | ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | P | S/12 | CPL |
| 1171.6.8..... | REVIEW INSPECTION TAG (NAVMC 1018) | | S/12 | PVT |
| MOS 1181, FABRIC REPAIR SPECIALIST | | | | |
| 1181.1.1..... | PREPARE TEXTILE/CLOTHING REPAIR SHOP FOR FIELD USE | P | S/12 | PVT |
| 1181.2.1..... | OPERATE GROMMET/TAP AND DIE | S | 12 | PVT |

| TASK NUMBER | TASK | FS | MOJT SUST | Grade |
|----------------|---|----|--------------|-------|
| 1181.2.2..... | OPERATE HEAVY-DUTY SEWING MACHINE | S | 12 | PVT |
| 1181.2.3..... | OPERATE LIGHT-DUTY SEWING MACHINE | S | 12 | PVT |
| 1181.2.4..... | OPERATE MEDIUM-DUTY SEWING MACHINE | S | 12 | PVT |
| 1181.2.5..... | OPERATE SNAP PRESS MACHINE | S | 12 | PVT |
| 1181.3.1..... | INVENTORY TENTAGE/CANVAS REPAIR KIT | P | S/12 | PVT |
| 1181.3.2..... | PERFORM FABRIC LIMITED TECHNICAL INSPECTION (LTI) | S | 12 | PVT |
| 1181.3.3..... | REMOVE SALVAGEABLE PARTS FROM UNSERVICEABLE FABRIC | | S/12 | PVT |
| 1181.4.1..... | PERFORM SEWING MACHINE PREVENTIVE MAINTENANCE | S | 12 | PVT |
| 1181.5.1..... | REPAIR SEWING MACHINE | S | 12 | PVT |
| 1181.5.2..... | REPAIR CLOTHING/TEXTILE EQUIPMENT | S | 12 | PVT |
| 1181.5.3..... | REPAIR ALICE PACK COMPONENTS | P | S/12 | PVT |
| 1181.5.4..... | REPAIR BODY ARMOR/FLAK JACKET | P | S/12 | PVT |
| 1181.5.5..... | REPAIR TENT | S | 12 | PVT |
| 1181.5.6..... | REPLACE CAB COVER WINDOW | P | S/12 | PVT |
| 1181.5.7..... | REPAIR/REPLACE ZIPPER/ZIPPER HEAD | S | 6 | PVT |
| 1181.5.8..... | REPAIR CANVAS COVER/COMPONENTS | P | S/12 | PVT |
| 1181.5.9..... | REPAIR SLEEPING BAG | P | S/12 | PVT |
| 1181.5.10..... | REPLACE TEXTILE EQUIPMENT SNAP | S | 12 | PVT |
| 1181.5.11..... | REPLACE VEHICLE SEAT COVER | P | S/12 | PVT |
| 1181.6.1..... | COMPLETE/REVIEW DAILY PROGRESS REPORT (DPR) | P | S/6 | CPL |
| 1181.6.2..... | COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | P | S/3 | PVT |
| 1181.6.3..... | COMPLETE EQUIPMENT REPAIR ORDER STOCK LIST (EROSL) (NAVMC 10925) | P | S/6 | PVT |
| 1181.6.4..... | COMPLETE DISPOSAL FORM (DD 1348-1) | | S/12 | CPL |
| 1181.6.5..... | COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | P | S/6 | PVT |
| 1181.6.6..... | ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | P | S/12 | CPL |
| 1181.6.7..... | REVIEW INSPECTION TAG (NAVMC 1018) | | S/12 | PVT |
| 1181.7.1..... | PREPARE FABRIC REPAIR SHOP MASTER WORK SCHEDULES | P | S/6 | SSGT |
| 1181.7.2..... | SUPERVISE FABRIC REPAIRS | P | S/6 | CPL |
| 1181.7.3..... | SUPERVISE SHOP RECEIVING, CLASSIFICATION, AND REPAIR OPERATIONS | | S/6 | CPL |
| 1181.7.4..... | ENFORCE QUALITY CONTROL <u>STANDARDS</u> | | S/6 | CPL |
| 1181.7.5..... | SUPERVISE EQUIPMENT OPERATION | | S/6 | CPL |
| 1181.7.6..... | ANALYZE DAILY PROGRESS REPORT (DPR) | P | S/6 | SSGT |

ENCLOSURE (3)

COMMON ITS LISTING

1. General. This enclosure provides a cross reference of ITS's common to more than one MOS within OccFld 11. It is designed to assist the trainer in consolidating training for common tasks. Essential subjects ITS's are not listed since all Marines, regardless of MOS or grade, must be able to achieve the standard for those tasks.
2. Format. The enclosure lists the Task Title for each common task within the OccFld. Common Task Numbers follow each Task Title.

TASK NUMBER EXAMPLE: 1120.1.1

- o 1120 refers to the applicable UTILITIES OFFICER.
- o .1 refers to the Duty Area within the MOS; in this case, "MANAGE MIMMS".
- o .1 refers to the Task; in this case, "Manage Maintenance Administration".

| <u>TASK TITLE</u> | <u>COMMON TASK NUMBERS</u> | | | |
|---|----------------------------|-----------|-----------|----------|
| ANALYZE DAILY PROGRESS REPORT (DPR) | 1141.7.6 | 1171.6.6 | 1181.7.6 | |
| ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | 1141.7.7 | 1161.4.5 | 1169.4.24 | 1171.6.7 |
| | 1181.6.6 | | | |
| COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATION LOG AND SERVICE RECORD (NAVMC 10524) | 1141.7.1 | 1142.2.1 | | |
| COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATOR LOG AND SERVICE RECORD (NAVMC 10524) | 1161.4.1 | 1171.6.1 | | |
| COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | 1141.7.2 | 1142.2.2 | 1161.4.2 | 1171.6.2 |
| | 1181.6.2 | | | |
| COMPLETE EQUIPMENT REPAIR ORDER STOCK LIST (EROSL) (NAVMC 10925) | 1161.4.3 | 1171.6.3 | 1181.6.3 | |
| COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 6960) | 1141.7.5 | 1161.1.2 | 1171.6.4 | |
| COMPLETE WORKSHEET FOR QUARTERLY EQUIPMENT RECORD AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | 1141.7.4 | 1142.2.4 | 1171.6.5 | 1181.6.5 |
| DIRECT GENERATOR SET OPERATION | 1141.8.8 | 1169.2.4 | | |
| INSPECT INTERIOR ELECTRICAL WIRING SYSTEM | 1141.3.3 | 1169.4.18 | | |
| MANAGE HAZARDOUS WASTE AND MATERIAL CONTROL PROGRAM | 1120.4.3 | 1161.5.5 | | |
| PLAN FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | 1141.8.1 | 1169.4.12 | | |
| REPAIR SMALL MOBILE WATER CHILLER | 1161.3.13 | 1171.5.14 | | |
| REVIEW INSPECTION TAG (NAVMC 1018) | 1161.4.6 | 1169.4.21 | 1171.6.8 | 1181.6.7 |
| SUPERVISE CORROSION AND DETERIORATION CONTROL | 1142.3.3 | 1161.5.4 | 1169.4.23 | |

ENCLOSURE (4)

TRAINING SUPPORT

1. This enclosure identifies training support in four categories for each MOS or the OccFLd as a whole. Some of the support items are identified by tasks, groups of tasks, or for the entire task list as follows:

Appendix A: Training Devices, Simulators, and Training Aids

Appendix B: Training Equipment

Appendix C: Ammunition, Explosives, and Pyrotechnics

Appendix D: Training Materials

2. If support identified in any appendix does not apply, the appendix will be included stating: "THIS ENCLOSURE IS NOT APPLICABLE"

ENCLOSURE (5)

TRAINING DEVICES, SIMULATORS, AND TRAINING AIDS

THIS ENCLOSURE IS NOT APPLICABLE

Appendix A to
ENCLOSURE (5)

5-A-1

TRAINING EQUIPMENT

THIS ENCLOSURE IS NOT APPLICABLE

Appendix B to
ENCLOSURE (5)

5-B-1

AMMUNITION, EXPLOSIVES, AND PYROTECHNICS

| TASK | DODIC | NOMENCLATURE | INITIAL PROFICIENCY | PER ITERATION | ANNUAL SUSTAINMENT |
|------|-------|--------------|------------------------|------------------|-----------------------|
|------|-------|--------------|------------------------|------------------|-----------------------|

THIS ENCLOSURE IS NOT APPLICABLE

Appendix C to
ENCLOSURE (5)

TRAINING MATERIALS

THIS ENCLOSURE IS NOT APPLICABLE

5-D-1

Appendix D to
ENCLOSURE (5)

INDIVIDUAL TRAINING STANDARDS FOR UTILITIES, OCCUPATIONAL FIELD (OCCFLD) 11

MOS 1120, UTILITIES OFFICER

| | | |
|--------------------------------|---|-------|
| DUTY AREA 1 - MIMMS MANAGEMENT | | |
| TASK 1120.1.1..... | MANAGE MAINTENANCE ADMINISTRATION | 6-A-1 |
| TASK 1120.1.2..... | MANAGE UTILITIES EQUIPMENT MILITARY OCCUPATIONAL SPECIALTY PROGRAM | 6-A-1 |
| TASK 1120.1.3..... | MANAGE RECORDS AND FORMS | 6-A-2 |
| TASK 1120.1.4..... | MANAGE PUBLICATIONS | 6-A-2 |
| TASK 1120.1.5..... | MANAGE UTILITIES EQUIPMENT AVAILABILITY | 6-A-3 |
| TASK 1120.1.6..... | MANAGE FABRIC REPAIR PROGRAM | 6-A-3 |
| TASK 1120.1.7..... | MANAGE UTILITIES EQUIPMENT SECTION SUPPLY SUPPORT PROGRAM | 6-A-4 |
| TASK 1120.1.8..... | MANAGE SUPPORT AND TEST EQUIPMENT | 6-A-5 |
| TASK 1120.1.9..... | MANAGE PREVENTIVE MAINTENANCE (PM) PROGRAM | 6-A-5 |
| TASK 1120.1.10..... | MANAGE CORRECTIVE MAINTENANCE (CM) PROGRAM | 6-A-5 |
| TASK 1120.1.11..... | MANAGE MIMMS-AIS | 6-A-6 |
| TASK 1120.1.12..... | MANAGE MAINTENANCE RELATED PROGRAMS | 6-A-6 |

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|---|----------------------------|-------|
| <u>DUTY AREA 2 - UTILITIES EQUIPMENT MAINTENANCE SHOP OPERATIONS MANAGEMENT</u> | | |
| TASK 1120.2.1..... | LAY OUT A MAINTENANCE SHOP | 6-A-8 |

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|--|--|--------|
| <u>DUTY AREA 3 - UTILITIES EQUIPMENT OPERATIONS MANAGEMENT</u> | | |
| TASK 1120.3.1..... | MANAGE UTILITIES EQUIPMENT LICENSING PROGRAM | 6-A-8 |
| TASK 1120.3.2..... | MANAGE UTILITIES SITE RECONNAISSANCE | 6-A-9 |
| TASK 1120.3.3..... | MANAGE THE EMPLOYMENT OF REFRIGERATION/AIR CONDITIONING SYSTEMS | 6-A-9 |
| TASK 1120.3.4..... | MANAGE THE EMPLOYMENT OF MOBILE ELECTRIC POWER GENERATION AND ELECTRICAL DISTRIBUTION SYSTEMS | 6-A-10 |
| TASK 1120.3.5..... | MANAGE THE EMPLOYMENT OF WATER PURIFICATION AND DISTRIBUTION SYSTEMS | 6-A-11 |
| TASK 1120.3.6..... | MANAGE THE EMPLOYMENT OF HYGIENE/SANITATION SYSTEMS | 6-A-11 |
| TASK 1120.3.7..... | MANAGE THE EMBARKATION/TRANSPORTATION OF UTILITIES EQUIPMENT | 6-A-12 |
| TASK 1120.3.8..... | ASSIST IN THE PREPARATION OF THE ENGINEER PORTIONS OF AN OPERATION ORDER | 6-A-12 |

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|-----------------------------------|---|--------|
| DUTY AREA 4 - PROGRAMS MANAGEMENT | | |
| TASK 1120.4.1..... | MANAGE SAFETY PROGRAMS | 6-A-13 |
| TASK 1120.4.2..... | MANAGE CORROSION AND DETERIORATION CONTROL | 6-A-13 |
| TASK 1120.4.3..... | MANAGE HAZARDOUS WASTE AND MATERIAL CONTROL PROGRAM | 6-A-14 |

MOS 1141, ELECTRICIAN

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|---|--------|
| <u>DUTY AREA 1 - EQUIPMENT SET UP</u> | |
| TASK 1141.1.1..... | 6-B-1 |
| PARALLEL GENERATOR SETS | |
| TASK 1141.1.2..... | 6-B-1 |
| MOUNT/DISMOUNT GENERATOR SET ON TRAILER | |
| <u>DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES</u> | |
| TASK 1141.2.1..... | 6-B-2 |
| OPERATE FLOODLIGHT SET | |
| TASK 1141.2.2..... | 6-B-2 |
| OPERATE GENERATOR SET | |
| TASK 1141.2.3..... | 6-B-3 |
| PERFORM GENERATOR SET LOAD TEST | |
| <u>DUTY AREA 3 - NON-EQUIPMENT OPERATIONAL PROCEDURES</u> | |
| TASK 1141.3.1..... | 6-B-3 |
| INVENTORY LIGHT SET | |
| TASK 1141.3.2..... | 6-B-4 |
| INVENTORY LINEMAN'S TOOL KIT | |
| TASK 1141.3.3..... | 6-B-4 |
| INSPECT INTERIOR ELECTRICAL WIRING SYSTEM | |
| TASK 1141.3.4..... | 6-B-4 |
| INSTALL FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | |
| TASK 1141.3.5..... | 6-B-5 |
| RECOVER FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | |
| TASK 1141.3.6..... | 6-B-6 |
| INSTALL INTERIOR WIRING SYSTEM | |
| TASK 1141.3.7..... | 6-B-6 |
| REPAIR FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | |
| TASK 1141.3.8..... | 6-B-7 |
| INVENTORY MOBILE ELECTRIC POWER DISTRIBUTION SYSTEM (MEPDIS) | |
| TASK 1141.3.9..... | 6-B-7 |
| CONNECT ELECTRIC MOTOR | |
| TASK 1141.3.10..... | 6-B-7 |
| INVENTORY UTILITIES EQUIPMENT | |
| TASK 1141.3.11..... | 6-B-8 |
| REPAIR INTERIOR ELECTRICAL WIRING SYSTEM | |
| <u>DUTY AREA 4 - PREVENTIVE MAINTENANCE</u> | |
| TASK 1141.4.1..... | 6-B-8 |
| PERFORM PREVENTIVE MAINTENANCE | |
| <u>DUTY AREA 5 - CORRECTIVE MAINTENANCE</u> | |
| TASK 1141.5.1..... | 6-B-9 |
| CHANGE FLOODLIGHT SET LAMPS | |
| <u>DUTY AREA 6 - TRAINING PROGRAMS</u> | |
| TASK 1141.6.1..... | 6-B-9 |
| PERFORM ELECTRICAL SAFETY TRAINING | |
| <u>DUTY AREA 7 - RECORDS, DOCUMENTS, AND PUBLICATIONS MAINTENANCE</u> | |
| TASK 1141.7.1..... | 6-B-10 |
| COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATION LOG AND SERVICE RECORD (NAVMC 10524) | |
| TASK 1141.7.2..... | 6-B-10 |
| COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | |
| TASK 1141.7.3..... | 6-B-11 |
| COMPLETE EQUIPMENT REPAIR ORDER STOCKAGE LIST (EROSL) (NAVMC 10925) | |
| TASK 1141.7.4..... | 6-B-11 |
| COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | |
| TASK 1141.7.5..... | 6-B-11 |
| COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D) | |
| TASK 1141.7.6..... | 6-B-12 |
| ANALYZE DAILY PROGRESS REPORT (DPR) | |

TASK 1141.7.7..... 6-B-12
ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561)

DUTY AREA 8 - PROGRAMS MANAGEMENT

TASK 1141.8.1..... 6-B-13
PLAN FIELD ELECTRICAL POWER GENERATION AND
DISTRIBUTION SYSTEM
TASK 1141.8.2..... 6-B-13
DIRECT FIELD ELECTRICAL POWER GENERATION AND
DISTRIBUTION SYSTEM INSTALLATION
TASK 1141.8.3..... 6-B-14
DIRECT FIELD ELECTRICAL POWER GENERATION AND
DISTRIBUTION SYSTEM OPERATION
TASK 1141.8.4..... 6-B-14
DIRECT INTERIOR WIRING SYSTEM REPAIR
TASK 1141.8.5..... 6-B-15
DESIGN INTERIOR ELECTRICAL WIRING SYSTEM
TASK 1141.8.6..... 6-B-16
MONITOR ELECTRICAL LOAD BALANCING
TASK 1141.8.7..... 6-B-16
CERTIFY DUMMY LOAD OPERATION
TASK 1141.8.8..... 6-B-17
DIRECT GENERATOR SET OPERATION
TASK 1141.8.9..... 6-6-17
DIRECT FLOODLIGHT SET INSTALLATION

MOS 1142, ELECTRICAL EQUIPMENT REPAIR SPECIALIST

| | | |
|---|---|-------|
| <u>DUTY AREA 1 - CORRECTIVE MAINTENANCE</u> | | |
| TASK 1142.1.1..... | PERFORM LIMITED TECHNICAL INSPECTION (LTI) | 6-C-1 |
| TASK 1142.1.2..... | REPAIR FLOODLIGHT SET ELECTRICAL SYSTEM | 6-C-1 |
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MOS 1161, REFRIGERATION MECHANIC

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| PERFORM AIR CONDITIONER/REFRIGERATION EQUIPMENT PREVENTIVE MAINTENANCE | |
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| REPLACE AIR CONDITIONER/REFRIGERATION UNIT ELECTRICAL COMPONENTS | |
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| PERFORM AIR CONDITIONER/REFRIGERATION UNIT LIMITED TECHNICAL INSPECTION LTI | |
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| REPAIR AUTOMOTIVE AIR CONDITIONER | |
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| DIAGNOSE ICE FLAKE MACHINE ELECTRICAL SYSTEM | |
| TASK 1161.3.11..... | 6-D-9 |
| REPLACE ICE-CREAM PLANT ELECTRIC MOTORS | |
| TASK 1161.3.12..... | 6-D-9 |
| DIAGNOSE REFRIGERATION UNIT MECHANICAL SYSTEM MALFUNCTION | |
| TASK 1161.3.13..... | 6-D-10 |
| REPAIR SMALL MOBILE WATER CHILLER | |
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| TASK 1161.4.2..... | 6-D-10 |
| COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | |
| TASK 1161.4.3..... | 6-D-11 |
| COMPLETE EQUIPMENT REPAIR ORDER STOCK LIST (EROSL) (NAVMC 10925) | |
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| ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | |
| TASK 1161.4.6..... | 6-D-12 |
| REVIEW INSPECTION TAG (NAVMC 1018) | |
| TASK 1161.4.7..... | 6-D-12 |
| ANALYZE DAILY PROGRESS REPORT (DRP) | |
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| TASK 1161.5.1..... | 6-D-13 |
| SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT INSTALLATION/OPERATION | |
| TASK 1161.5.2..... | 6-D-13 |
| SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT PREVENTIVE MAINTENANCE | |
| TASK 1161.5.3..... | 6-D-14 |
| SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT CORRECTIVE MAINTENANCE | |

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| TASK 1161.5.4..... | 6-D-14 |
| SUPERVISE CORROSION AND DETERIORATION CONTROL | |
| TASK 1161.5.5..... | 6-D-15 |
| MANAGE HAZARDOUS WASTE AND MATERIAL CONTROL PROGRAM | |

MOS 1169, UTILITIES CHIEF

DUTY AREA 1 - MIMMS SUPERVISION

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| DIRECT MAINTENANCE ADMINISTRATION | |
| TASK 1169.1.2..... | 6-E-1 |
| DIRECT UTILITIES EQUIPMENT MILITARY OCCUPATIONAL SPECIALTY (MOS) TRAINING PROGRAM | |
| TASK 1169.1.3..... | 6-E-2 |
| DIRECT RECORDS AND FORMS | |
| TASK 1169.1.4..... | 6-E-2 |
| DIRECT PUBLICATIONS | |
| TASK 1169.1.5..... | 6-E-3 |
| DIRECT UTILITIES EQUIPMENT AVAILABILITY | |
| TASK 1169.1.6..... | 6-E-3 |
| DIRECT UTILITIES EQUIPMENT SECTION SUPPLY SUPPORT PROGRAM | |
| TASK 1169.1.7..... | 6-E-4 |
| DIRECT SUPPORT AND TEST EQUIPMENT | |
| TASK 1169.1.8..... | 6-F-4 |
| DIRECT PREVENTIVE MAINTENANCE PROGRAM (PM) | |
| TASK 1169.1.9..... | 6-E-5 |
| DIRECT CORRECTIVE MAINTENANCE PROGRAM | |
| TASK 1169.1.10..... | 6-E-5 |
| DIRECT MIMMS-AIS | |
| TASK 1169.1.11..... | 6-E-6 |
| DIRECT MAINTENANCE RELATED PROGRAMS | |
| TASK 1169.1.12..... | 6-E-7 |
| ANALYZE DPR | |

DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES

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| DIRECT DUMMY LOAD OPERATION | |
| TASK 1169.2.2..... | 6-E-8 |
| DIRECT BARE BASE SHOWER FACILITY INSTALLATION/OPERATION | |
| TASK 1169.2.3..... | 6-E-8 |
| DIRECT FLOODLIGHT SET INSTALLATION/OPERATION | |
| TASK 1169.2.4..... | 6-E-9 |
| DIRECT GENERATOR SET OPERATION | |
| TASK 1169.2.5..... | 6-E-9 |
| DIRECT BARE BASE LAUNDRY FACILITY INSTALLATION/OPERATION | |
| TASK 1169.2.6..... | 6-E-10 |
| DIRECT REFRIGERATION/AIR CONDITIONING EQUIPMENT INSTALLATION/OPERATION | |
| TASK 1169.2.7..... | 6-E-10 |
| DIRECT CAMP SANITATION SYSTEM MAINTENANCE | |
| TASK 1169.2.8..... | 6-E-11 |
| DIRECT ENVIRONMENTAL PROTECTION REGULATIONS COMPLIANCE | |
| TASK 1169.2.9..... | 6-E-11 |
| DIRECT PLANNING OF REFRIGERATION/AIR CONDITIONER SYSTEM | |
| TASK 1169.2.10..... | 6-E-12 |
| DIRECT EQUIPMENT, TOOL SET, AND LIGHT SET INVENTORIES | |
| TASK 1169.2.11..... | 6-E-12 |
| DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM INSTALLATION/RECOVERY | |
| TASK 1169.2.12..... | 6-E-13 |
| DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM OPERATION/MAINTENANCE | |
| TASK 1169.2.13..... | 6-E-13 |
| DIRECT INTERIOR WIRING INSTALLATION | |
| TASK 1169.2.14..... | 6-E-14 |
| DIRECT PLUMBING REPAIRS | |
| TASK 1169.2.15..... | 6-E-14 |
| DIRECT PLUMBING SYSTEM INSTALLATION | |
| TASK 1169.2.16..... | 6-E-15 |
| DIRECT WASTE DISPOSAL/LATRINE SITE CLOSING AND MARKING | |
| TASK 1169.2.17..... | 6-E-15 |
| DIRECT BARE BASE SHOWER FACILITY PLANNING | |
| TASK 1169.2.18..... | 6-E-16 |
| DIRECT PREPARATION OF UTILITIES EQUIPMENT FOR TRANSPORTATION | |

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| <u>DUTY AREA 3 - NON-EQUIPMENT OPERATIONAL PROCEDURES</u> | |
| TASK 1169.3.1..... | 6-E-17 |
| OBSERVE ELECTRICAL LOAD BALANCING | |
| TASK 1169.3.2..... | 6-E-17 |
| CONDUCT UTILITIES SITE RECONNAISSANCE | |

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| <u>DUTY AREA 4 - PROGRAMS MANAGEMENT</u> | |
| TASK 1169.4.1..... | 6-E-18 |
| ANALYZE CHANGING WATER SUPPLY SITUATION | |
| TASK 1169.4.2..... | 6-E-18 |
| PLAN CAMP SANITATION SYSTEM | |
| TASK 1169.4.3..... | 6-E-19 |
| DIRECT CAMP SANITATION SYSTEM INSTALLATION | |
| TASK 1169.4.4..... | 6-E-19 |
| DIRECT WATER SUPPLY SYSTEM CONSTRUCTION | |
| TASK 1169.4.5..... | 6-E-20 |
| ESTABLISH FIELD MAINTENANCE FACILITY | |
| TASK 1169.4.6..... | 6-E-20 |
| DIRECT FIELD MAINTENANCE FACILITY | |
| TASK 1169.4.7..... | 6-E-21 |
| DIRECT SAFETY PROGRAM | |
| TASK 1169.4.8..... | 6-E-21 |
| DIRECT UNIT TRAINING PROGRAM | |
| TASK 1169.4.9..... | 6-E-21 |
| ANALYZE NEW EQUIPMENT FOR TRAINING REQUIREMENTS | |
| TASK 1169.4.10..... | 6-E-22 |
| DIRECT UTILITIES EQUIPMENT EMBARKATION PROGRAM | |
| TASK 1169.4.11..... | 6-E-22 |
| DIRECT WATER PURIFICATION/STORAGE SYSTEM OPERATION | |
| TASK 1169.4.12..... | 6-E-23 |
| PLAN FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM | |
| TASK 1169.4.13..... | 6-E-23 |
| PLAN FIELD LAUNDRY OPERATION | |
| TASK 1169.4.14..... | 6-E-24 |
| PLAN MOVEMENT OF WATER POINTS | |
| TASK 1169.4.15..... | 6-E-24 |
| PLAN PLUMBING SYSTEM | |
| TASK 1169.4.16..... | 6-E-24 |
| PLAN WATER PURIFICATION/STORAGE SYSTEM | |
| TASK 1169.4.17..... | 6-E-25 |
| PLAN INTERIOR ELECTRICAL WIRING SYSTEM DESIGN | |
| TASK 1169.4.18..... | 6-E-25 |
| INSPECT INTERIOR ELECTRICAL WIRING SYSTEM | |
| TASK 1169.4.19..... | 6-E-26 |
| CONDUCT ELECTRICAL SAFETY TRAINING | |
| TASK 1169.4.20..... | 6-E-26 |
| PREPARE COST/DATE/EXPENDITURE RECORDS | |
| TASK 1169.4.21..... | 6-E-27 |
| REVIEW INSPECTION TAG (NAVMC 1018) | |
| TASK 1169.4.22..... | 6-E-27 |
| DIRECT REQUISITION OF SHOP SUPPLIES | |
| TASK 1169.4.23..... | 6-E-27 |
| SUPERVISE CORROSION AND DETERIORATION CONTROL | |
| TASK 1169.4.24..... | 6-E-28 |
| ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | |

MOS 1171, HYGIENE EQUIPMENT OPERATOR

DUTY AREA 1 - EQUIPMENT SET UP

| | |
|---|-------|
| TASK 1171.1.1..... | 6-F-1 |
| SET UP/DISMANTLE WATER TANK | |
| TASK 1171.1.2..... | 6-F-1 |
| INSTALL PLUMBING SYSTEMS | |
| TASK 1171.1.3..... | 6-F-2 |
| SET UP/DISMANTLE SIXCON WATER TANK MODULE | |
| TASK 1171.1.4..... | 6-F-2 |
| SET UP SANITATION FACILITIES | |
| TASK 1171.1.5..... | 6-F-3 |
| OPERATE FORWARD AREA WATER POINT SUPPLY SYSTEM (FAWPSS) | |

DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES

| | |
|---|-------|
| TASK 1171.2.1..... | 6-F-3 |
| OPERATE GALLONS PER MINUTE (GPM) PUMPS | |
| TASK 1171.2.2..... | 6-F-4 |
| OPERATE BARE BASE SHOWER FACILITY | |
| TASK 1171.2.3..... | 6-F-4 |
| OPERATE LAUNDRY FACILITY | |
| TASK 1171.2.4..... | 6-F-5 |
| OPERATE REVERSE OSMOSIS WATER PURIFICATION UNIT (ROWPU) | |
| TASK 1171.2.5..... | 6-F-6 |
| OPERATE SMALL MOBILE WATER CHILLER | |
| TASK 1171.2.6..... | 6-F-6 |
| OPERATE MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LMT | |
| TASK 1171.2.7..... | 6-F-7 |
| OPERATE DELOUSING UNIT | |
| TASK 1171.2.8..... | 6-F-7 |
| OPERATE TACTICAL WATER DISTRIBUTION SYSTEM | |

DUTY AREA 3 - NON-EQUIPMENT OPERATIONAL PROCEDURES

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| TASK 1171.3.1..... | 6-F-8 |
| DEVELOP WATER SOURCE | |
| TASK 1171.3.2..... | 6-F-8 |
| DEVELOP WATER POINT | |
| TASK 1171.3.3..... | 6-F-9 |
| INSPECT WATER POINT | |
| TASK 1171.3.4..... | 6-F-10 |
| PERFORM WATER RECONNAISSANCE | |
| TASK 1171.3.5..... | 6-F-10 |
| PREPARE WATER DISTRIBUTION SCHEDULES | |
| TASK 1171.3.6..... | 6-F-10 |
| PERFORM CORROSION AND DETERIORATION CONTROL | |

DUTY AREA 4 - PREVENTIVE MAINTENANCE

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| TASK 1171.4.1..... | 6-F-11 |
| PERFORM PUMP PREVENTIVE MAINTENANCE | |
| TASK 1171.4.2..... | 6-F-11 |
| PERFORM SHOWER FACILITY PREVENTIVE MAINTENANCE | |
| TASK 1171.4.3..... | 6-F-12 |
| PERFORM LAUNDRY FACILITY PREVENTIVE MAINTENANCE | |
| TASK 1171.4.4..... | 6-F-12 |
| PERFORM REVERSE OSMOSIS WATER PURIFICATION UNIT PREVENTIVE MAINTENANCE | |
| TASK 1171.4.5..... | 6-F-13 |
| PERFORM SIXCON WATER TANK MODULE PREVENTIVE MAINTENANCE | |
| TASK 1171.4.6..... | 6-F-13 |
| PERFORM MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LIGHTWEIGHT MILITARY TYPE (LMT) PREVENTIVE MAINTENANCE | |

DUTY AREA 5 - CORRECTIVE MAINTENANCE

| | |
|---------------------------------------|--------|
| TASK 1171.5.1..... | 6-F-14 |
| REPAIR GALLONS PER MINUTE (GPM) PUMPS | |
| TASK 1171.5.2..... | 6-F-14 |
| DIAGNOSE SHOWER FACILITY MALFUNCTION | |
| TASK 1171.5.3..... | 6-F-15 |
| DIAGNOSE LAUNDRY FACILITY MALFUNCTION | |

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| TASK 1171.5.4..... | 6-F-15 |
| REPAIR PLUMBING SYSTEM | |
| TASK 1171.5.5..... | 6-F-16 |
| DIAGNOSE REVERSE OSMOSIS WATER PURIFICATION UNIT MALFUNCTION | |
| TASK 1171.5.6..... | 6-F-17 |
| DIAGNOSE SIXCON WATER TANK/PUMP MODULE MALFUNCTION | |
| TASK 1171.5.7..... | 6-F-17 |
| DIAGNOSE SMALL MOBILE WATER CHILLER MALFUNCTION | |
| TASK 1171.5.8..... | 6-F-18 |
| DIAGNOSE MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LIGHTWEIGHT MEDIUM TYPE (LMT) MALFUNCTION | |
| TASK 1171.5.9..... | 6-F-18 |
| PERFORM HYGIENE EQUIPMENT LIMITED TECHNICAL INSPECTION (LTI) | |
| TASK 1171.5.10..... | 6-F-19 |
| REPAIR SHOWER FACILITY | |
| TASK 1171.5.11..... | 6-F-19 |
| REPAIR LAUNDRY FACILITY | |
| TASK 1171.5.12..... | 6-F-20 |
| REPAIR REVERSE OSMOSIS WATER PURIFICATION UNIT | |
| TASK 1171.5.13..... | 6-F-20 |
| REPAIR SIXCON WATER TANK/PUMP MODULE | |
| TASK 1171.5.14..... | 6-F-21 |
| REPAIR SMALL MOBILE WATER CHILLER | |
| TASK 1171.5.15..... | 6-F-21 |
| REPAIR 3000 LIGHTWEIGHT MEDIUM TYPE (LMT) WATER PURIFICATION SYSTEM | |
| <u>DUTY AREA 6 - RECORDS, DOCUMENTS, AND PUBLICATIONS</u> | |
| TASK 1171.6.1..... | 6-F-22 |
| COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATOR LOG AND SERVICE RECORD (NAVMC 10524) | |
| TASK 1171.6.2..... | 6-F-22 |
| COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | |
| TASK 1171.6.3..... | 6-F-22 |
| COMPLETE EQUIPMENT REPAIR ORDER STOCK LIST (EROSL) (NAVMC 10925) | |
| TASK 1171.6.4..... | 6-F-23 |
| COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D) | |
| TASK 1171.6.5..... | 6-F-23 |
| COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | |
| TASK 1171.6.6..... | 6-F-24 |
| ANALYZE DAILY PROGRESS REPORT (DPR) | |
| TASK 1171.6.7..... | 6-F-24 |
| ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | |
| TASK 1171.6.8..... | 6-F-24 |
| REVIEW INSPECTION TAG (NAVMC 1018) | |

MOS 1181, FABRIC REPAIR SPECIALIST

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| <u>DUTY AREA 1 - EQUIPMENT SET UP</u> | |
| TASK 1181.1.1..... | 6-G-1 |
| PREPARE TEXTILE/CLOTHING REPAIR SHOP FOR FIELD USE | |
| <u>DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES</u> | |
| TASK 1181.2.1..... | 6-G-1 |
| OPERATE GROMMET/TAP AND DIE | |
| TASK 1181.2.2..... | 6-G-2 |
| OPERATE HEAVY-DUTY SEWING MACHINE | |
| TASK 1181.2.3..... | 6-G-2 |
| OPERATE LIGHT-DUTY SEWING MACHINE | |
| TASK 1181.2.4..... | 6-G-2 |
| OPERATE MEDIUM-DUTY SEWING MACHINE | |
| TASK 1181.2.5..... | 6-G-3 |
| OPERATE SNAP PRESS MACHINE | |
| <u>DUTY AREA 3 - NON-EQUIPMENT OPERATIONAL PROCEDURES</u> | |
| TASK 1181.3.1..... | 6-G-3 |
| INVENTORY TENTAGE/CANVAS REPAIR KIT | |
| TASK 1181.3.2..... | 6-G-4 |
| PERFORM FABRIC LIMITED TECHNICAL INSPECTION (LTI) | |
| TASK 1181.3.3..... | 6-G-4 |
| REMOVE SALVAGEABLE PARTS FROM UNSERVICEABLE FABRIC | |
| <u>DUTY AREA 4 - PREVENTIVE MAINTENANCE</u> | |
| TASK 1181.4.1..... | 6-G-S |
| PERFORM SEWING MACHINE PREVENTIVE MAINTENANCE | |
| <u>DUTY AREA 5 - CORRECTIVE MAINTENANCE</u> | |
| TASK 1181.5.1..... | 6-G-5 |
| REPAIR SEWING MACHINE | |
| TASK 1181.5.2..... | 6-G-6 |
| REPAIR CLOTHING/TEXTILE EQUIPMENT | |
| TASK 1181.5.3..... | 6-G-6 |
| REPAIR ALICE PACK COMPONENTS | |
| TASK 1181.5.4..... | 6-G-6 |
| REPAIR BODY ARMOR/FLAK JACKET | |
| TASK 1181.5.5..... | 6-G-7 |
| REPAIR TENT | |
| TASK 1181.5.6..... | 6-G-7 |
| REPLACE CAB COVER WINDOW | |
| TASK 1181.5.7..... | 6-G-7 |
| REPAIR/REPLACE ZIPPER/ZIPPER HEAD | |
| TASK 1181.5.8..... | 6-G-8 |
| REPAIR CANVAS COVER/COMPONENTS | |
| TASK 1181.5.9..... | 6-G-8 |
| REPAIR SLEEPING BAG | |
| TASK 1181.5.10..... | 6-G-8 |
| REPLACE TEXTILE EQUIPMENT SNAP | |
| TASK 1181.5.11..... | 6-G-9 |
| REPLACE VEHICLE SEAT COVER | |
| <u>DUTY AREA 6 - RECORDS, DOCUMENTS, AND PUBLICATIONS</u> | |
| TASK 1181.6.1..... | 6-G-9 |
| COMPLETE/REVIEW DAILY PROGRESS REPORT (DPR) | |
| TASK 1181.6.2..... | 6-G-10 |
| COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245) | |
| TASK 1181.6.3..... | 6-G-10 |
| COMPLETE EQUIPMENT REPAIR ORDER STOCK LIST (EROSL) (NAVMC 10925) | |
| TASK 1181.6.4..... | 6-G-11 |
| COMPLETE DISPOSAL FORM (DD 1348-1) | |
| TASK 1181.6.5..... | 6-G-11 |
| COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560) | |
| TASK 1181.6.6..... | 6-G-11 |
| ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561) | |

ENCLOSURE (6)

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| TASK 1181.6.7..... | 6-G-12 |
| REVIEW INSPECTION TAG (NAVMC 1018) | |

DUTY AREA 7 - PROGRAMS MANAGEMENT

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| TASK 1181.7.1..... | 6-G-12 |
| PREPARE FABRIC REPAIR SHOP MASTER WORK SCHEDULES | |
| TASK 1181.7.2..... | 6-G-12 |
| SUPERVISE FABRIC REPAIRS | |
| TASK 1181.7.3..... | 6-G-13 |
| SUPERVISE SHOP RECEIVING, CLASSIFICATION, AND REPAIR OPERATIONS | |
| TASK 1181.7.4..... | 6-G-13 |
| ENFORCE QUALITY CONTROL <u>STANDARDS</u> | |
| TASK 1181.7.5..... | 6-G-14 |
| SUPERVISE EQUIPMENT OPERATION | |
| TASK 1181.7.6..... | 6-G-14 |
| ANALYZE DAILY PROGRESS REPORT (DPR) | |

MOS 1120, UTILITIES OFFICER

DUTY AREA 1 - MIMMS MANAGEMENT

TASK: 1120.1.1 MANAGE MAINTENANCE ADMINISTRATION

CONDITION(S): Provided with the reference, maintenance resources, and appropriate maintenance directives.

STANDARD: Maintenance administration will be managed to support mission requirements per the requirements of the reference.

PERFORMANCE STEPS:

1. Provide input to the unit MMSOP.
2. Conduct internal inspections program.
3. Plan, organize, and coordinate the use of maintenance resources.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700.15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.2 MANAGE UTILITIES EQUIPMENT MOS TRAINING PROGRAM

CONDITION(S): Provided with the references and a unit annual training plan.

STANDARD: The MOS training program will be managed to meet all mission requirements and per the requirements of the references.

PERFORMANCE STEPS:

1. Identify individual training requirements.
2. Identify unit training requirements.
3. Develop training program policies and procedures.
4. Plan a utilities equipment operator and maintenance training program.
5. Manage the MOS training program.

REFERENCE(S):

1. MCO 1500.40, U.S. Marine Corps Training Philosophy, Priorities and Requirements
2. MCO P4790.2C, MIMMS Field Procedures Manual
3. MCO 3501.7A, MCCRES Volume VI
4. Unit T/O
5. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.3 MANAGE RECORDS AND FORMS

CONDITION(S): Provided with utilities equipment, appropriate records, forms, and references.

STANDARD: Records and forms will be managed to support the mission per the requirements of the references.

PERFORMANCE STEPS:

1. Identify utilities equipment records requirements.
2. Identify maintenance records requirements.
3. Identify calibration control requirements.
4. Manage utilities equipment records.
5. Manage maintenance records.
6. Manage calibration control records.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO 5210.11D, Marine Corps Records Management Program
3. MCO 5213.7C, Marine Corps Forms Management Program
4. TM 4700-15/1, Equipment Record Procedures
5. UM 4790-5, MIMMS (AIS) FMSS
6. TI 4733-15/1, Calibration Requirements

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.4 MANAGE PUBLICATIONS

CONDITION(S): Provided with equipment and non-equipment related publications and the references.

STANDARD: Technical publications will be managed to support the mission per the requirements of the references.

PERFORMANCE STEPS:

1. Identify requirements based on the mission and T/E.
2. Evaluate publications on hand.
3. Evaluate control procedures.
4. Evaluate NAVMC 10772 procedures.
5. Ensure deficiencies are corrected.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO P5215.17B, The USMC Tech Pub System
3. MCO P5600.31F, MAR COR Publications and Printing

4. NAVMC 2761, Catalog of Publications
5. Appropriate Stock Lists
6. Unit T/O
7. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.5 MANAGE UTILITIES EQUIPMENT AVAILABILITY

CONDITION(S): Provided with utilities equipment, maintenance resources, and references.

STANDARD: Equipment availability will be maintained to support the mission per the references.

PERFORMANCE STEPS:

1. Identify the shortages/excesses.
2. Review readiness posture.
3. Review priority designator assignment.
4. Review maintenance cycle time.
5. Develop a plan to increase equipment availability.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO 3000.11, MARES Intro Policy Manual
3. MCBUL 3000, Table MARES Log Rpt SORTS
4. Unit T/O
5. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.6 MANAGE FABRIC REPAIR PROGRAM

CONDITION(S): Provided with canvas/textile repair equipment, maintenance resources, T/O, T/E, and references.

STANDARD: The fabric repair program will be managed to support the mission per the references.

PERFORMANCE STEPS:

1. Evaluate fabric repair requirements.
2. Manage production control priorities.
3. Manage canvas/textile corrective maintenance program.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual

2. TM 4700-15/1, Equipment Record Procedures
3. FM 10-16, General Fabric Repair
4. TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment
5. Unit T/O
6. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.7 MANAGE UTILITIES EQUIPMENT SECTION SUPPLY SUPPORT PROGRAM

CONDITION(S): Provided with MIMMS-AIS reports, appropriate equipment and non-equipment publications, and references.

STANDARD: Supply support will be managed to support the mission requirements per the references.

PERFORMANCE STEPS:

1. Coordinate repair parts support requirements with the unit supply officer.
2. Submit input for field budget requirements.
3. Manage/execute allocated funding.
4. Determine maintenance and operational float requirements.
5. Manage shop/section PEB and ERO layette procedures.
6. Manage shop/section validation/reconciliation procedures.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO P4400.82F, MIMMS Control Item Management Manual
3. MCO 4400.16G, UMMIPS
4. MCO 4400.150C, Consumer Level Supply Policy Manual
5. MCO P7100.8K, Field Budget Guidance Manual
6. TM 4700-15/1, Equipment Record Procedures
7. UM 4400-15, Organic Property Control Procedures
8. UM 4400-124, FMF SASSY Using Unit Procedures
9. UM 4790-5, MIMMS (AIS) FMSS
10. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.8 MANAGE SUPPORT AND TEST EQUIPMENT

CONDITION(S): Provided with support and test equipment and references.

STANDARD: Support and test equipment will be managed to support the mission per the references.

PERFORMANCE STEPS:

1. Determine support and test equipment assets and requirements.
2. Manage tool sets, chests, and kits.
3. Manage collateral equipment.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. Unit T/O
4. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.9 MANAGE PREVENTIVE MAINTENANCE PROGRAM

CONDITION(S): Provided with utilities equipment, maintenance resources, and references.

STANDARD: The preventive maintenance program will be managed to support the mission per the references.

PERFORMANCE STEPS:

1. Determine equipment PM requirements.
2. Review PM schedule.
3. Manage the utilities equipment preventive maintenance program.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.10 MANAGE CORRECTIVE MAINTENANCE PROGRAM

CONDITION(S): Provided with utilities equipment, maintenance resources, MIMMS-AIS reports, and references.

STANDARD: The utilities equipment corrective maintenance program will be managed to support the mission per the references.

PERFORMANCE STEPS:

1. Manage production control priorities.
2. Manage utilities equipment corrective maintenance program.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.11 MANAGE MIMMS-AIS

CONDITION(S): Provided with MIMMS-AIS reports, supporting documentation, and references.

STANDARD: MIMMS-AIS reports will be managed per the references.

PERFORMANCE STEPS:

1. Manage Daily Process Report.
2. Manage Daily Transaction Listing.
3. Manage daily SASSY transactions.
4. Manage daily LM2 Report.
5. Manage weekly TAM Report.
6. Manage weekly Maintenance Exceptions Report.
7. Manage weekly Material Report.
8. Manage weekly LM2 Report.
9. Manage weekly Shop Summary Report.
10. Manage Class II Reports (as required).

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. UM 4790-5, MIMMS (AIS) FMSS

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.1.12 MANAGE MAINTENANCE RELATED PROGRAMS

CONDITION(S): Provided with utilities equipment and references.

STANDARD: Maintenance related programs will be managed to support the mission per the references.

PERFORMANCE STEPS:

1. Determine requirements for maintenance related programs.
2. Manage modification control program.
3. Manage calibration control program.

4. Manage new equipment warranty program.
5. Manage Joint Oil Analysis Program (JOAP).
6. Manage Replacement and Evacuation Program (R&E).
7. Manage Repair and Return program (R&R).
8. Manage Quality Deficiency Program (QDR).
9. Manage Recoverable Items Program (WIR).
10. Manage Quality Control (QC) Program.
11. Manage Hazardous Waste programs for batteries.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO P4400.82F, MIMMS Control Item Management Manual
3. MCO 4105.2, USMC Warranty Procedures
4. MCO 4731.1A, Oil Analysis for Ground Equipment
5. MCO 4733.1A, USMC Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
6. TI 4710-14/1, Recovery and Evacuation Criteria USMC
7. TI 4731-14/1, USMC Oil Analysis Program
8. TI 4733-15/1, Calibration Requirements
9. TB 43-0134, Battery Disposition and Disposal (US Army)
10. Appropriate Engineer Equipment Material Fielding Plans (MCO's)
11. Appropriate Equipment Technical Manuals
12. Appropriate Stock Lists
13. MI Standards File
14. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

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DUTY AREA 2 - UTILITIES EQUIPMENT MAINTENANCE SHOP OPERATIONS MANAGEMENT

TASK: 1120.2.1 LAY OUT A MAINTENANCE SHOP

CONDITION(S): Provided an area/facility, maintenance resources, a maintenance mission, and references.

STANDARD: A maintenance shop will be planned to meet the mission requirements per the reference.

PERFORMANCE STEPS:

1. Identify resources.
2. Identify mission requirements.
3. Identify environmental controls and natural resources considerations.
4. Design a plan for a maintenance shop.
5. Implement the maintenance shop plan.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO P5090.2, Environmental Compliance and Protection Manual
3. MCO P11000.8, Environmental Management
4. OPNAVINST 5090.1, Environmental and Natural Resource Protection Manual
5. Federal, State, and Local Regulations
6. Unit T/O
7. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 3 - UTILITIES EQUIPMENT OPERATIONS MANAGEMENT

TASK: 1120.3.1 MANAGE UTILITIES EQUIPMENT LICENSING PROGRAM

CONDITION(S): Provided with utilities equipment, personnel, support documentation, and references.

STANDARD: The utilities equipment licensing program will be managed to support the mission per the references.

PERFORMANCE STEPS:

1. Identify licensing requirements.
2. Identify the individual Marine's requirements.
3. Develop a unit licensing program.
4. Manage the utilities licensing program.

REFERENCE(S):

1. TM 11275-1/4, Engineer Equipment Licensing Manual
2. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.3.2 MANAGE UTILITIES SITE RECONNAISSANCE

CONDITION(S): Provided an operation plan, an area map, and references.

STANDARD: The utilities site reconnaissance will be managed so that there will be a reconnaissance of the area specified in the operations order for the purpose of planning utilities installation and operation for the proposed camp site per the references.

PERFORMANCE STEPS:

1. Review operation plan.
2. Review the map of the area to be reconnoitered.
3. Ensure the utilities sites are examined and the map is marked with the suggested locations of the equipment and facilities.
4. Advise the commander on the employment of utilities assets, capacities, and support requirements.

REFERENCE(S):

1. FMFM 5-34, Engineer Field Data
2. FM 10-52, Field Water Supply
3. FM 20-31, Electric Power Generation in the Field
4. FM 21-10, Field Hygiene and Sanitation
5. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.3.3 MANAGE THE EMPLOYMENT OF REFRIGERATION/AIR CONDITIONING SYSTEMS

CONDITION(S): Provided an operation plan, a utilities reconnaissance report, T/O, T/E, and references.

STANDARD: The refrigeration/air conditioning system will be monitored so that it will accommodate the number of personnel and facilities specified in the operation order and per the references.

PERFORMANCE STEPS:

1. Analyze the utilities site reconnaissance report.
2. Review the operation order and camp layout.
3. Analyze the plan for installation and operation of refrigeration/air conditioning systems for the camp.

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REFERENCE(S):

1. Appropriate Equipment Technical Manuals
2. Unit T/O
3. Unit T/E
4. MCO 10230.2_

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.3.4 MANAGE THE EMPLOYMENT OF MOBILE ELECTRIC POWER GENERATION AND ELECTRICAL DISTRIBUTION SYSTEMS

CONDITION(S): Provided an operation plan, a utilities reconnaissance report, T/O, T/E, and references.

STANDARD: The mobile electric power generation and electrical distribution will be managed so that it will accommodate the personnel and facilities specified in the operation order per the references.

PERFORMANCE STEPS:

1. Analyze the utilities site reconnaissance report.
2. Review the operation order and camp layout.
3. Manage the design of interior and exterior wiring systems.
4. Manage interior and exterior wiring systems installation.
5. Manage the distribution system to ensure power consumption of phases and components are balanced.
6. Manage the inspection of electrical power generation and distribution systems.
7. Manage safety and code specifications.

REFERENCE(S):

1. FM 20-31, Electric Power Generation in the Field
2. TM 5-760, Interior Wiring
3. TM 5-765, Electric Power Transmission and Distribution
4. TM 5-766, Electric Power Generation in the Field
5. TM 11310-15/1, Alternating Current Power Requirements
6. National Electrical Code
7. Appropriate Equipment Technical Manuals
8. Unit T/O
9. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.3.5 MANAGE THE EMPLOYMENT OF WATER PURIFICATION AND DISTRIBUTION SYSTEMS

CONDITION(S): Provided an operation plan, utilities reconnaissance report, T/O, T/E, and references.

STANDARD: The water purification/distribution system will be managed so that it accommodates the personnel and facilities specified in the operation plan per the references.

PERFORMANCE STEPS:

1. Analyze the utilities site reconnaissance report.
2. Review the operation plan and camp layout.
3. Manage the water purification/distribution system construction.
4. Analyze changing water supply situation.
5. Manage the requirements for the movement of the water point.
6. Manage water purification/storage system operation.
7. Manage the preparation of water purification/distribution records and documents.
8. Manage plumbing systems.

REFERENCE(S):

1. FM 10-52, Field Water Supply
2. Appropriate Equipment Technical Manuals
3. Unit T/O
4. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.3.6 MANAGE THE EMPLOYMENT OF HYGIENE/SANITATION SYSTEMS

CONDITION(S): Provided an operation plan, utilities reconnaissance report, T/O, T/E, and references.

STANDARD: The hygiene/sanitation systems will be managed so that it will accommodate the personnel and facilities specified in the operation plan per the references.

PERFORMANCE STEPS:

1. Analyze the utilities site reconnaissance report.
2. Review the operation plan and camp layout.
3. Manage the design of sanitation systems.
4. Manage the construction of sanitation systems.
5. Manage the closing of sanitation systems.
6. Manage the installation/operation of shower facilities.
7. Manage the installation/operation of laundry facilities.

REFERENCE(S):

1. FM 10-52, Field Water Supply

2. FM 10-280, Mobile Field Laundry, Clothing Exchange, and Bath Operations
3. FM 21-10, Field Hygiene and Sanitation
4. TM 5-551, Plumbing and Pipefitting
5. Appropriate Equipment Technical Manuals
6. Unit T/O
7. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.3.7 MANAGE THE EMBARKATION/TRANSPORTATION OF UTILITIES EQUIPMENT

CONDITION(S): Provided an operation plan specifying the type of transportation requested, date of transportation, utilities equipment to be transported/embarked, and references.

STANDARD: The preparation of utilities equipment for transportation/embarkation will be monitored so that all specified equipment will be properly prepared for the type of transportation specified in the operation order per the references.

PERFORMANCE STEPS:

1. Advise the commander on transportation of utilities equipment.
2. Manage the preparation of utilities equipment for transportation.
3. Manage the embarkation of utilities equipment.

REFERENCE(S):

1. Joint Pub 3-02.2, Joint Doctrine for Amphibious Embarkation
2. FMFM 4-3, Landing Support Operations
3. FMFM 4-6, Movement of Units in Air Force Aircraft
4. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.3.8 ASSIST IN THE PREPARATION OF THE ENGINEER PORTIONS OF AN OPERATION ORDER

CONDITION(S): Provided a requirement for an operation order, commander's guidance/scheme of maneuver, a mission statement, task organization, pencil and paper, and references.

STANDARD: Input will be provided to assist in the preparation of appropriate portions of the operation order so that all necessary elements will be established per the references.

PERFORMANCE STEPS:

1. Review appropriate section(s) of the references.
2. Coordinate input from subordinate utilities elements.
3. Assist in the preparation of the appropriate engineer appendix/plan/order.

REFERENCE(S):

1. FMFM 3-1, Command and Staff Action
2. FMFM 5-34, Engineer Field Data
3. FM 10-52, Field Water Supply
4. FM 20-31, Electric Power Generation in the Field
5. FM 21-10, Field Hygiene and Sanitation

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 4 - PROGRAMS MANAGEMENT

TASK: 1120.4.1 MANAGE SAFETY PROGRAMS

CONDITION(S): Provided with utilities equipment shop/section, resources, and references.

STANDARD: Safety programs will be managed so that health and safety within the shop/section is maintained per the references.

PERFORMANCE STEPS:

1. Identify equipment safety requirements.
2. Identify personnel safety requirements.
3. Manage maintenance shop safety program.
4. Manage safety industrial health program.

REFERENCE(S):

1. MCO P5100.8D, Marine Corps Ground Occupational Safety and Health Program
2. MCO 5100.19C, USMC Traffic Safety Program
3. MCO 5101.8D, USMC Ground Mishap Reporting
4. NAVMC 2692, Safety Program Management Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.4.2 MANAGE CORROSION AND DETERIORATION CONTROL

CONDITION(S): Provided with material that is stored or used under conditions which are subject to corrosion or deterioration; paints, solutions, cleaning materials, coverings, and the reference.

STANDARD: All material subject to corrosion and/or deterioration will be managed to protect/prevent loss or damage during storage or use per the reference.

PERFORMANCE STEPS:

1. Identify corrosion and/or deterioration control requirements.
2. Conduct a corrosion and/deterioration control program.

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REFERENCE(S):

1. TM 3080-50, Corrosion Control Procedures for Depot Maintenance Activities

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1120.4.3 MANAGE HAZARDOUS WASTE AND MATERIAL CONTROL PROGRAM

CONDITION(S): Given applicable technical manuals and directives.

STANDARD: The hazardous waste and material control program will be managed so that all HAZMAT is stored, used, maintained and disposed of safely in both field and garrison working environment.

PERFORMANCE STEPS:

1. Review the established HAZMAT program.
2. Identify federal, state, and local EPA requirements.
3. Maintain the HAZMAT storage point.
4. Utilize required/recommended handling protection when working with HAZMAT.

REFERENCE(S):

1. 40 CFR 264.16, Resource Conservation and Recovery Act
2. 40 CFR 265.16, Resource Conservation and Recovery Act
3. 49 CFR 172.704(a)(1), Hazardous Material Regulations
4. 49 CFR 172.704(a)(3), Hazardous Material Regulations
5. DoD Instructions 6050.5
6. DoD Instructions 6050.5-G-1
7. 29 CFR 1900.120_

ADMINISTRATIVE INSTRUCTIONS:

1. Must be EPA certified.
-

MOS 1141, ELECTRICIAN

DUTY AREA 1 - EQUIPMENT SET UP

TASK: 1141.1.1 PARALLEL GENERATOR SETS

CONDITION(S): Provided with multiple generator sets, mechanic's tool box, appropriate cables or conductors, and the references.

STANDARD: Observing all safety precautions per the reference.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Ensure all generator sets units are turned off.
3. Ensure both generator sets are properly grounded.
4. Ensure all load requirements and voltage requirements are observed.
5. Connect generator sets.
6. Synchronize the generators.

REFERENCE(S):

1. FM 20-31, Electric Power Generation in the Field
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.1.2 MOUNT/DISMOUNT GENERATOR SET ON TRAILER

CONDITION(S): Provided generator set, trailer, forklift or crane, mechanic's toolbox, and applicable references.

STANDARD: Properly on or from the trailer, per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of references.
2. Lift generator set on to trailer.
3. Fasten generator set to trailer.
4. Reverse procedure to dismount generator set.

REFERENCE(S):

1. MI-6115-34/18, Mounting and Generator Set on M353 Trailer
2. MI-6115-24/24, Trailer Mounting of 10W Generator Sets MEP-003A or MEP-112A on M116A2 Trailers

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1141.2.1 OPERATE FLOODLIGHT SET

CONDITION(S): Provided an operational floodlight set with a generator, mechanic's tool box, a designated area to be illuminated, and references.

STANDARD: So that all components will be properly connected and in the proper location and will illuminate the designated area, per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Unpack floodlight set.
3. Place applicable environmental materials in place.
4. Set up floodlight set.
5. Perform operator maintenance.
6. Illuminate designated area.
7. Shut down floodlight set.
8. Perform after operation inspection.
9. Repack floodlight set.

REFERENCE(S):

1. TM 00857A-14/1, Floodlight Set, Skid Mounted, with Tower (Model SM-4A3-0)
2. TM 05684C, MEP 003A Generator Set

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.2.2 OPERATE GENERATOR SET

CONDITION(S): Provided generator set, mechanic's tool box, and reference.

STANDARD: So that it will apply voltage to appropriate equipment per the reference.

PERFORMANCE STEPS:

1. Review appropriate section of the reference.
2. Set up generator set.
3. Place applicable environmental materials in place.
4. Perform generator set operator maintenance.
5. Ensure all power cables are properly installed.
6. Start generator set.
7. Shut down generator set.
8. Perform after operation inspection.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.2.3 PERFORM GENERATOR SET LOAD TEST

CONDITION(S): Provided a dummy load, generator set, and applicable references.

STANDARD: Safely per the references and the dummy load used.

PERFORMANCE STEPS:

1. Review the appropriate section(s) of the references.
2. Connect dummy load to generator.
3. Perform dummy load operator's maintenance.
4. Start generator.
5. Apply load to generator.
6. Shut down generator.
7. Disconnect dummy load.

REFERENCE(S):

1. TM 06870A-15, Dummy Load Electrical, Type DA-543/G, Operation and Maintenance
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.1 INVENTORY LIGHT SET

CONDITION(S): Provided a general illumination light set and the references.

STANDARD: To ensure that all component parts are present and in good working order per the references.

PERFORMANCE STEPS:

1. Match each item on component list to components in tight set.
2. Examine each component in tight set.
3. If any component is missing, damaged or inoperable, notify supervisor.

REFERENCE(S):

1. SL-3-00941A, Components List for Light Set General Illumination, Large
2. SL-3-01290A, Components List for Light Set General Illumination, Small

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ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.2 INVENTORY LINEMAN’S TOOL KIT

CONDITION(S): Provided a Lineman’s tool kit and the reference.

STANDARD: To ensure that all component parts are present and in good working order per the reference.

PERFORMANCE STEPS:

- 1. Match each item on component list to components in tool kit.
- 2. Examine each component in tool kit.
- 3. If any tool or other component is missing, damaged, or inoperable, notify supervisor.

REFERENCE(S):

- 1. SL-3-01204A, Components List for Tool Kit, Lineman’s

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.3 INSPECT INTERIOR ELECTRICAL WIRING SYSTEM

CONDITION(S): Provided a structure with installed interior electrical wiring system, an amprobe, a multimeter, the electrical blue prints for the structure, construction blue prints for the structure, and reference.

STANDARD: So that it is installed per the structure plans per the reference.

PERFORMANCE STEPS:

- 1. Review appropriate section of the reference.
- 2. Examine electrical blueprints.
- 3. Identify any part of the electrical system not wired as specified by the electrical blueprints or that fails to comply with the National Electric Code and/or Local requirements.
- 4. List all discrepancies identified and specify corrective action required for each discrepancy.

REFERENCE(S):

- 1. National Electrical Code

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.4 INSTALL FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM

CONDITION(S): Provided a field electrical power generation and distribution system plan, MEPDIS system, generator sets, floodlight sets, general illumination light set, an installation crew equipped with lineman’s tool set, material for constructing a bus bar, tents, and references.

STANDARD: So that power will be provided to each tent, each area will be illuminated (as specified in the field electrical power generation and distribution system plan and the camp layout) and the installation will conform to safety and wiring specifications per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Review the camp layout and distribution plan.
3. Assist in the following operations:
 - a. Prepare generator sites.
 - b. Install bus bar/MEPDIS panel.
 - c. Connect generator sets to bus bars.
 - d. Construct wiring harnesses for tents.
 - e. Install wiring harnesses in tents.
 - f. Install electrical cables/wires throughout camp.
 - g. Inspect system to ensure all tents and equipment are wired safely and per the field electrical power generation and distribution system plan.
 - h. Test operate the system to ensure proper operation.

REFERENCE(S):

1. TM O8712A-14/1, Operation and Maintenance Manual for Mobile Electric Power Distribution System (MEPDIS)
2. TM 5-765, Electric Power Transmission and Distribution
3. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.5 RECOVER FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM

CONDITION(S): Provided an installed field electrical power generation and distribution system plan, generator sets, lineman's tool set, packing container for general illumination light set, and references.

STANDARD: So that it can be transported safely without damage per the references.

PERFORMANCE STEPS:

1. Assist in the the following operations:
 - a. Disconnect all generator sets and bus bars from the distribution system.
 - b. Disconnect all wiring harnesses from tents.
 - c. Disconnect all electrical components from wiring harnesses and tents.
 - d. Disassemble all components of the distribution system.
 - e. Recover all cables, wiring harnesses, bus bars, and electrical fixtures.
 - f. Store all appropriate components in the packing container for the general illumination light set.
 - g. Prepare all generator sets and floodlight sets for transportation.

REFERENCE(S):

1. TM 5-765, Electric Power Transmission and Distribution

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ENCLOSURE (6)

2. FM 20-31, Electric Power Generation in the Field
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.6 INSTALL INTERIOR WIRING SYSTEM

CONDITION(S): Provided a structure, construction blueprints, a lineman's tool set, a Bill Of Materials (BOM), all material listed on the BOM, and the reference.

STANDARD: So that the structure will be wired per the construction blueprints and the installation will be completed safely and on time per the reference.

PERFORMANCE STEPS:

1. Review the electrical blueprints.
2. Review applicable section(s) of the reference.
3. Install interior wiring.
4. Install electrical components.
5. Test system.

REFERENCE(S):

1. National Electrical Code

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.7 REPAIR FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM

CONDITION(S): Provided an installed field electrical power generation and distribution system with a malfunction, a camp layout, appropriate tools, a field electrical power generation and distribution system plan, multimeter, and references.

STANDARD: So that all operational, maintenance, and safety discrepancies and deficiencies are repaired, replaced, or corrective action initiated per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of appropriate references.
2. Diagnose the field electrical power generation and distribution system malfunction.
3. List all discrepancies identified and specify corrective action required for each discrepancy.
4. Repair or replace components if in electrician's echelon of maintenance.
5. Initiate EROSL, if parts are required.

REFERENCE(S):

1. FM 20-31, Electric Power Generation in the field
2. TM 5-765, Electric Power Transmission and Distribution
3. TM 4700-15/1, Equipment Record Procedures

4. National Electrical Code

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.8 INVENTORY MOBILE ELECTRIC POWER DISTRIBUTION SYSTEM (MEPDIS)

CONDITION(S): Provided an MEPDIS system and the reference.

STANDARD: So that all component parts are present and in good working order per the reference.

PERFORMANCE STEPS:

1. Match each component in the system to the reference.
2. Examine each component in the system.
3. List any missing, damaged, or inoperable components and report to supervisor.

REFERENCE(S):

1. SL-3-08712A, Components List for MEPDIS System

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.9 CONNECT ELECTRIC MOTOR

CONDITION(S): Provided with equipment containing electric motors, applicable tools, generators, test equipment, a multimeter, and the reference.

STANDARD: So that there is proper phasing.

PERFORMANCE STEPS:

1. Wire electric motors.
2. Inspect wiring.
3. Start the motor.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.10 INVENTORY UTILITIES EQUIPMENT

CONDITION(S): Provided with a quantity of completed ECR cards or CMRs, equipment SL-3s, a quantity of utilities equipment, and references.

STANDARD: So that all equipment identified by the ECR's and CMR's will be accounted for and any missing equipment will be identified per the references.

PERFORMANCE STEPS:

1. Locate each piece of equipment identified by the ECRs and CMRs.

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- 2. Verify serial number of each piece of equipment inventoried.

REFERENCE(S):

- 1. MCO P4790.2C, MIMMS Field Procedures Manual
- 2. UM 4400-124, FMF SASSY Using Unit Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.3.11 REPAIR INTERIOR ELECTRICAL WIRING SYSTEM

CONDITION(S): Provided a building with an installed electrical system with a malfunction, building construction plans, multimeter, amprobe, and the reference.

STANDARD: So that all faulty components will be operational per the reference.

PERFORMANCE STEPS:

- 1. Examine the building plans.
- 2. Review the symptoms.
- 3. Locate the wiring system fault.
- 4. Document the fault(s).
- 5. Notify appropriate personnel to initiate repairs.
- 6. Repair faults.

REFERENCE(S):

- 1. TM 5-760, Interior Wiring

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 4 - PREVENTIVE MAINTENANCE

TASK: 1141.4.1 PERFORM PREVENTIVE MAINTENANCE

CONDITION(S): Provided an item of equipment, mechanic's tool box, and the reference.

STANDARD: So that equipment will be serviced per the schedule and any deficiencies will be corrected/identified per the reference.

PERFORMANCE STEPS:

- 1. Review equipment technical manuals.
- 2. Inspect equipment.
- 3. Service equipment.
- 4. Document the maintenance performed.

REFERENCE(S):

1. TM-12 Series for specific equipment

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 5 - CORRECTIVE MAINTENANCE

TASK: 1141.5.1 CHANGE FLOODLIGHT SET LAMPS

CONDITION(S): Provided Equipment Repair Order (ERO) from owning unit, floodlight set, replacement lamps, applicable tools, and applicable reference.

STANDARD: So that they function properly and the ERO will be documented properly showing maintenance actions taken per the reference.

PERFORMANCE STEPS:

1. Review owning unit ERO to understand equipment problem, as documented.
2. Review proper section(s) of appropriate reference.
3. Change the floodlight set lamps, as needed.
4. Correct any defects found, if authorized to do so.
5. Document maintenance actions.

REFERENCE(S):

1. TM 08857A-1411, Floodlight Set, Skid Mounted with Tower (Model SM-4A3-O)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 6 - TRAINING PROGRAMS

TASK: 1141.6.1 PERFORM ELECTRICAL SAFETY TRAINING

CONDITION(S): Provided an operation order, a field electrical power generation and distribution system plan, personnel using the system, and references.

STANDARD: So that the location of "Off limits" areas, meaning of warning signs, prohibited electrical equipment and reasons, prohibited practices and reasons, emergency procedures, and unsafe conditions are identified per the references.

PERFORMANCE STEPS:

1. Review operation order.
2. Review system plan.
3. Review applicable section(s) of the references.
4. Deliver the training to applicable personnel.
5. Evaluate training.

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ENCLOSURE (6)

REFERENCE(S):

1. TM 5-765, Electric Power Transmission and Distribution
2. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 7 - RECORDS, DOCUMENTS, AND PUBLICATIONS MAINTENANCE

TASK: 1141.7.1 COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATION LOG AND SERVICE RECORD (NAVMC 10524)

CONDITION(S): Provided Consolidated Engineer Equipment Operation Log and Service Record, Motor Vehicle and Engineer Equipment Record Folder (NAVMC 696D), and the references.

STANDARD: So that the descriptive data, scheduled preventive maintenance intervals, mileage, fuel consumption determined, and hours of operation will be listed accurately and completely per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Make appropriate operational entries.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.7.2 COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245)

CONDITION(S): Provided an ERO and references.

STANDARD: So that all relevant sections of the ERO will be accurately completed per type of service performed per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review proper section(s) of equipment Technical Manual to obtain maintenance information
3. Make appropriate maintenance entries.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.7.3 COMPLETE EQUIPMENT REPAIR ORDER STOCKAGE LIST (EROSL)
(NAVMC 10925)

CONDITION(S): Provided an EROSL, appropriate stock list(s), and references.

STANDARD: So that all relevant sections of the EROSL will be accurately completed per type of service performed per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Make appropriate header entries.
4. Make appropriate card column entries to order parts.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.7.4 COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560)

CONDITION(S): Provided a worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment and the references.

STANDARD: So that all repairs, services, and materials utilized to complete the scheduled maintenance services will be accurately recorded on the worksheet per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review appropriate section(s) of the equipment TM.
3. Make appropriate Section A entries.
4. Make appropriate Section B entries.
5. Make appropriate Section D through P entries.

REFERENCE(S):

1. TM 4700-15/1. Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.7.5 COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D)

CONDITION(S): Provided a Motor Vehicle and Engineer Equipment Record Folder and the reference.

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STANDARD: So that the required entries will be made in appropriate section of the folder per equipment status and the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Make appropriate header entries.
3. Make appropriate historical entries.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.7.6 ANALYZE DAILY PROGRESS REPORT (DPR)

CONDITION(S): Provided a DPR, several Equipment Repair Orders (ERO), and the references.

STANDARD: To ensure that all sections of the report are filled out accurately and completely and the status of each piece of equipment is listed per information provided on ERO per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Review DPR.
3. Review the DTLs, SASSY transactions, and EROSLs.
4. Compare the information reviewed in Step 3 with that listed on the DPR.
5. Compile a list of discrepancies.
6. Submit list of discrepancies for correction.

REFERENCE(S):

1. UN 4790-5, MIMMS (AIS) FMSS
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.7.7 ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561)

CONDITION(S): Provided a Preventive Maintenance Roster and the reference.

STANDARD: So that all relevant sections will be accurate per type of service performed per the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Ensure proper equipment listing.
4. Ensure proper preventive maintenance intervals.

REFERENCE(S):

- 1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 8 - PROGRAMS MANAGEMENT

TASK: 1141.8.1 PLAN FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM

CONDITION(S): Provided a mission, map, camp layout, utilities site reconnaissance report, a T/E, a T/O, and references.

STANDARD: So that it will provide electrical power of the voltage, current, and frequency for the number and locations of tents and facilities specified per the references.

PERFORMANCE STEPS:

- 1. Review the mission, map, T/E, T/O, applicable reference(s), and camp layout.
- 2. Analyze the utilities site reconnaissance report.
- 3. Identify generator sites.
- 4. Balance loads.
- 5. Identify distribution system materials requirements.
- 6. Estimate man-hour requirements.
- 7. Estimate logistical support requirements.

REFERENCE(S):

- 1. TM 5-765, Electric Power Transmission and Distribution
- 2. FM 20-31, Electric Power Generation in the Field
- 3. TM 11310-15/1, Alternating Current Power Requirements

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.2 DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM INSTALLATION

CONDITION(S): Provided a field electrical power generation and distribution system plan, a camp layout, generator sets, floodlight sets, general illumination light set, an installation crew equipped with lineman's tool set, material for constructing a bus bar, tents, and references.

STANDARD: So that the electrical power will be provided to each tent, each area will be illuminated (as specified in the field electrical power generation and distribution system plan and the camp layout), and will conform to safety and wiring specifications per the references.

PERFORMANCE STEPS:

- 1. Direct generator set up.
- 2. Direct construction of bus bars.
- 3. Ensure the number of phases, number of wirers, and voltage requirements are considered.

4. Direct wiring harness installation.
5. Direct wiring of all tight fixtures and outlets in tents
6. Direct installation of electrical cables/wires throughout can.
7. Direct connection of cables to all tents and facilities.
8. Direct connection of cables to bus bars.
9. Inspect system to ensure all tents and equipment are wired safely, as specified in the field electrical power generation and distribution system plan.
10. Direct test operation of the system.

REFERENCE(S):

1. TM 5-765, Electric Power Transmission and Distribution
2. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.3 DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM OPERATION

CONDITION(S): Provided an operating field electrical power generation and distribution system, operators, a camp layout, a field electrical power generation and distribution system plan, and reference.

STANDARD: So that it will ensure the field electrical power generation and distribution system is operating normally, safely, and is providing electrical power to all facilities, as specified in the references.

PERFORMANCE STEPS:

1. Review the field electrical power generation and distribution system plan and applicable reference.
2. Examine the electrical power generation and distribution system to identify problem areas.
3. Brief operator personnel, answer questions, make assignments, discuss specific safety precautions, and provide an operation schedule.
4. Observe field electrical power generation and distribution system operation, correct any deficiencies, and provide guidance in proper procedures.
5. Ensure that all safety rules are observed, correct violations, and identify and correct unsafe situations.
6. Discuss operations with operators and their supervisors specifying action to be taken when problems arise.

REFERENCE(S):

1. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.4 DIRECT INTERIOR WIRING SYSTEM REPAIR

CONDITION(S): Provided a structure with installed interior electrical wiring system, the construction plans for the electrical wiring of the structure, a report detailing specific repairs to be made, a repair crew equipped with required lineman's tool sets, repair and replacement wiring materials, and the reference.

STANDARD: So that the wiring will be repaired per the construction plans, completed so that all interior wiring is fully operational, and the repair will be completed safely and on time per the reference.

PERFORMANCE STEPS:

1. Review the construction plans.
2. Review the report of specific repairs to be effected.
3. Brief the repair crew, answer questions, make assignments, discuss specific safety precautions, and provide crew with repair schedule.
4. Observe the electrical wiring repair in progress, correct deficiencies, and provide guidance in proper procedures.
5. Ensure that all safety precautions are followed, correct violations, and identify and correct unsafe situations.
6. Ensure that wiring repair proceeds according to schedule.
7. Inspect repaired wiring system to ensure that all components and fixtures specified in the construction blueprints are installed and that all repairs are installed.
8. Test repaired wiring to ensure that it is fully operational.

REFERENCE(S):

1. National Electrical Code

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.5 DESIGN INTERIOR ELECTRICAL WIRING SYSTEM

CONDITION(S): Provided a building requiring an interior electrical wiring system, the construction plans for the building, a report detailing interior electrical wiring system requirements, and references.

STANDARD: So that the wiring will meet the requirements of the report and the National Electric Code and the safety requirements of the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Review the construction plans.
3. Review the plan outlining the specific requirements for the interior electrical wiring.
4. Design a plan for the interior electrical wiring system.
5. Ensure that the interior electrical wiring system design conforms to the National Electric Code and references.

REFERENCE(S):

1. National Electric Code
2. TM 5-760, Interior Wiring

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.6 MONITOR ELECTRICAL LOAD BALANCING

CONDITION(S): Provided a field electrical power generation and distribution system, a multimeter, an amprobe, a diagram of the system, power requirements of all items connected to the system, and the reference.

STANDARD: So that the electrical power generation and distribution system will be within 10 percent when computed with the following formula:

$$\% \text{ unbalance} = \left(1 - \frac{P_{\text{min phase}}}{P_{\text{max phase}}} \right) \times 100$$

PERFORMANCE STEPS:

1. Examine the distribution system to determine power consumption of phases and components.
2. Ensure power is measured accurately on all phases.
3. Ensure calculation of percent (X) of unbalance is correct.
4. Examine plan for redistribution of loads.
5. Ensure percent (%) of unbalance is less than 10 percent (%) after redistribution.
6. Ensure power is measured accurately on all phases after redistribution.
7. Ensure calculation of percent (%) of unbalance is correct after redistribution.

REFERENCE(S):

1. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.7 CERTIFY DUMMY LOAD OPERATION

CONDITION(S): Provided a generator set, a dummy load, an operator, and the reference.

STANDARD: To determine proper operation per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Inspect the dummy load.
3. Ensure operator maintenance is being performed on schedule.
4. Ensure that all equipment is in safe condition and operated in a safe manner.
5. Ensure all reports are completed as required.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.8 DIRECT GENERATOR SET OPERATION

CONDITION(S): Provided a set up generator set, operator personnel, and the reference.

STANDARD: So that it will be operated properly per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Brief operator personnel on proper operating procedures, answer questions, and discuss safety precautions.
3. Observe the operation, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1141.8.9 DIRECT FLOODLIGHT SET INSTALLATION

CONDITION(S): Provided a mission, a floodlight set with a generator set, consolidated log (NAVMC 10524), an installation crew, and references.

STANDARD: So that it will operate properly and provide light to the area as specified in the references.

PERFORMANCE STEPS:

1. Review the references.
2. Brief installation crew, answer questions, make assignments, and discuss safety precautions.
3. Observe the installation process, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.
5. Ensure that floodlight sets are installed on time.
6. Ensure generator is properly mounted and connected or external power is properly connected, if used.

REFERENCE(S):

1. TM O8857A-14/1, Floodlight Set, Skid Mounted with Tower (Model SM-4A3-0)
2. TM 05684C-12, Operator, Organizational Maintenance Manual, Generator Set, (Model MEP-003A)
3. TM 05684C-34, Generator Set MEP-003A

ADMINISTRATIVE INSTRUCTIONS: (NONE)

MOS 1142, ELECTRICAL EQUIPMENT REPAIR SPECIALIST

DUTY AREA 1 - CORRECTIVE MAINTENANCE

TASK: 1142.1.1 PERFORM LIMITED TECHNICAL INSPECTION (LTI)

CONDITION(S): Provided Equipment Repair Order (ERO) from owning unit, engineer equipment, applicable tools, LTI sheet, and applicable references.

STANDARD: So that the engineer equipment LTI will be performed within the echelon of maintenance authorized and will be properly documented per the references.

PERFORMANCE STEPS:

1. Review applicable references.
2. Review ERO.
3. Inspect equipment.
4. Document equipment records.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals
2. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.1.2 REPAIR FLOODLIGHT SET ELECTRICAL SYSTEM

CONDITION(S): Provided Equipment Repair Order from owning unit, a faulty floodlight set electrical system with an operational MEP 003A generator set, applicable tools, generator, and applicable references.

STANDARD: So that it functions properly per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Diagnose the floodlight electrical system.
3. Replace or repair faulty components.
4. Operate unit to verify proper operation.
5. Document maintenance actions performed.

REFERENCE(S):

1. TM 08857A-14/1, Floodlight Set, Skid Mounted with Tower (Model SM-4A3-0)
2. TM 05654c-12, Operator, Organizational Maintenance Manual, Generator Set, (Model MEP-003A)
3. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

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TASK: 1142.1.3 REPAIR GENERATOR SET ELECTRICAL SYSTEM

CONDITION(S): Provided ERO from owning unit, a faulty generator set electrical system, applicable tooLs, test equipment, and references.

STANDARD: So that it functions property per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Diagnose generator set electrical system.
3. Replace or repair faulty components.
4. Adjust the generator set electrical system components, as needed.
5. Operate unit to verify proper operation.
6. Document maintenance actions performed.

REFERENCE(S):

1. User's manual for specific test equipment
2. Appropriate Equipment Technical Manuals
3. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.1.4 REPAIR HYGIENE EQUIPMENT ELECTRICAL SYSTEM

CONDITION(S): Provided Equipment Repair Order from owning unit, various faulty hygiene equipment electrical systems, applicable tools, licensed MOS 1171 to operate the equipment, and references.

STANDARD: So that the equipment functions properly per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Diagnose hygiene equipment electrical system malfunction.
3. Replace or repair faulty components.
4. Observe operation of unit to verify proper operation.
5. Document maintenance actions performed.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals
2. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.1.5 REPAIR DUMMY LOAD

CONDITION(S): Provided Equipment Repair Order (ERO) from owning unit, dummy load, applicable tools, and applicable references.

STANDARD: So that it functions properly and the ERO will be documented properly showing maintenance actions taken per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Diagnose dummy load set electrical system.
3. Replace or repair faulty components.
4. Operate unit to verify proper operation.
5. Document maintenance actions performed.

REFERENCE(S):

1. TM 07500A-14, Operation and Maintenance Instructions, Model A578 Load Bank
2. TM 06870A-15, Dummy Load Electrical, Type DA-543/G, Operation and Maintenance
3. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.1.6 REPAIR ELECTRICAL MOTORS

CONDITION(S): Provided Equipment Repair Order (ERO) from owning unit, malfunctioning electrical motors, applicable tools, and applicable references.

STANDARD: So that the motor will function properly, the ERO will be documented properly showing deficiencies noted, and maintenance actions taken per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Diagnose motor for deficiencies.
3. Correct defects as authorized.
4. Document maintenance actions performed.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals
2. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.1.7 REPAIR MOTOR CONTROL CIRCUITS

CONDITION(S): Provided Equipment Repair Order (ERO) from owning unit, motor control circuits, applicable tools, and applicable references.

STANDARD: So that the motor control circuit will function property, the ERO will be documented properly showing deficiencies noted, and maintenance actions taken per the references.

PERFORMANCE STEPS:

1. Review appropriate section of the references.
2. Diagnose motor control circuits for deficiencies.
3. Correct defects as authorized.
4. Document maintenance actions performed.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals
2. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 2 - RECORDS, DOCUMENTS, AND PUBLICATIONS MAINTENANCE

TASK: 1142.2.1 COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATION LOG AND SERVICE RECORD (NAVMC 10524)

CONDITION(S): Provided Consolidated Engineer Equipment Operation Log and Service Record, Motor Vehicle and Engineer Equipment Record Folder (NAVMC 696D), and the references.

STANDARD: So that the descriptive data, scheduled preventive maintenance intervals, mileage, and hours of operation will be listed accurately and completely per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Make appropriate operational entries.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.2.2 COMPLETE EQUIPMENT REPAIR ORDER (ERO) (NAVMC 10245)

CONDITION(S): Provided an ERO and references.

STANDARD: So that all relevant sections of the ERO will be accurately completed per type of service performed per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Make appropriate entries.

REFERENCE(S):

1. TM 4700-15/1. Equipment Record Procedures
2. UN 4790-5, MIMMS (AIS) FMSS
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.2.3 COMPLETE EQUIPMENT REPAIR ORDER STOCKAGE LIST (EROSL)
(NAVMC 10925)

CONDITION(S): Provided an EROSL, appropriate stock list(s), and references.

STANDARD: So that all relevant sections of the EROSL will be accurately completed per type of service performed per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Make appropriate header entries.
4. Make appropriate card column entries to order parts.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.2.4 COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND
TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560)

CONDITION(S): Provided a Worksheet for Quarterly Preventive Maintenance and
Technical Inspection for Engineer Equipment and the references.

STANDARD: So that all repairs, services, and materials utilized to complete
the scheduled maintenance services will be accurately recorded on the
worksheet per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review appropriate section(s) of the equipment TM(s).
3. Make appropriate Section A entries.
4. Make appropriate Section B entries.
5. Make appropriate Section D through P entries.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 3 - PROGRAMS MANAGEMENT

TASK: 1142.3.1 MONITOR MARINE CORPS INTEGRATED MAINTENANCE MANAGEMENT SYSTEM-AUTOMATED INFORMATION SYSTEM PROGRAM (MIMMS-AIS)

CONDITION(S): Provided with MIMMS-AIS reports, supporting documentation, and references.

STANDARD: Monitor MIMMS-AIS reports per the references.

PERFORMANCE STEPS:

1. Monitor Daily Process Report.
2. Monitor Daily Transaction Listing.
3. Monitor daily Supported Activities Supply Support System transactions.
4. Monitor daily Logistics Management 2 Report.
5. Monitor weekly Table of Authorized Materiel Report.
6. Monitor weekly Maintenance Exceptions Report.
7. Monitor weekly Material Report.
8. Monitor weekly LMZ Report.
9. Monitor weekly Shop Summary Report.
10. Monitor Class II Reports, as required.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. UM 4790-5, MIMMS (AIS) FMSS

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.3.2 DIRECT PREVENTIVE MAINTENANCE PROGRAM

CONDITION(S): Provided an item of equipment, mechanic's tool box, and the reference.

STANDARD: Direct preventive maintenance so that equipment will be serviced per the schedule and any deficiencies will be corrected/identified per the reference.

PERFORMANCE STEPS:

1. Review equipment technical manuals.
2. Inspect equipment.
3. Service equipment.

- 4. Document the maintenance performed.

REFERENCE(S):

- 1. TM-12 Series for specific equipment

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1142.3.3 SUPERVISE CORROSION AND DETERIORATION CONTROL

CONDITION(S): Provided with material that is stored or used under conditions which are subject to corrosion or deterioration (i.e. paints, solutions, cleaning materials and coverings) and the reference.

STANDARD: So that all material subject to corrosion and/or deterioration will be protected or prevented from loss or damage during storage or use per the reference.

PERFORMANCE STEPS:

- 1. Identify corrosion and/or deterioration control requirements.
- 2. Conduct a corrosion and/deterioration control program.

REFERENCE(S):

- 1. TM 3080-50, Corrosion Control Procedures for Depot Maintenance Activities

ADMINISTRATIVE INSTRUCTIONS: (NONE)

MOS 1161, REFRIGERATION MECHANIC

DUTY AREA 1 - EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1161.1.1 OPERATE AIR CONDITIONER/REFRIGERATION EQUIPMENT

CONDITION(S): Provided an air conditioner/refrigeration equipment, refrigeration mechanic's tool set, and the references.

STANDARD: The air conditioner/refrigeration equipment will operate normally, safely, and will not be damaged by the operation per the references.

PERFORMANCE STEPS:

1. Connect air conditioner/refrigeration equipment to a power source.
2. Start air conditioner/refrigeration equipment.
3. Perform operation checks.
4. Turn off air conditioner/refrigeration equipment.

REFERENCE(S):

1. TM 4120-15/1, Principal Technical Characteristics of U.S. Marine Corps Military Standard Air Conditioners, Section 5
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.1.2 COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D)

CONDITION(S): Provided a Motor Vehicle and Engineer Equipment Record Folder and the reference.

STANDARD: The Motor Vehicle and Engineer Equipment Record Folder will be completed so that the required entries will be made in appropriate section of the folder per equipment status and the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Complete Motor Vehicle and Engineer Equipment Record Folder.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.1.3 OPERATE ICE FLAKE MACHINE

CONDITION(S): Provided an ice flake machine, tool set, and the references.

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STANDARD: The ice flake machine will be operated so that no injury to personnel or damage to equipment is caused per the reference.

PERFORMANCE STEPS:

1. Connect to power source.
2. Connect water source.
3. Start unit.
4. Perform operational checks.
5. Turn off unit.

REFERENCE(S):

1. TM 00935F-15, Ice Making Machine, Flake Model FAM-149A
2. TM 00935H-25/1, Ice Making Machine, Flake Model MF6AE-3

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 2 - PREVENTIVE MAINTENANCE

TASK: 1161.2.1 PERFORM AIR CONDITIONER/REFRIGERATION EQUIPMENT PREVENTIVE MAINTENANCE

CONDITION(S): Provided air conditioner/refrigeration equipment, refrigeration mechanic's tool set, hot water, compressed air or soft bristle nonmetallic brush, and the references.

STANDARD: The air conditioner/refrigeration equipment preventive maintenance will be performed per the references.

PERFORMANCE STEPS:

1. Perform 1st echelon maintenance on air conditioner.
2. Perform 1st echelon maintenance on refrigeration unit.
3. Perform 1st echelon maintenance on ice flake machine.
4. Perform 1st echelon maintenance on ice cream plant.
5. Perform 1st echelon maintenance on small mobile water chiller.
6. Perform 1st echelon maintenance on 350 cu ft. refrigeration container.
7. Document maintenance performed.

REFERENCE(S):

1. TM 00934F-15/1, Plant, Ice Cream, 20 Quart Type III, Model M2070 Chapter 3
2. TM 00935F-15, Ice Making Machine, Flake
3. TM 00935H-25/1, Ice Making Machine, Flake, Model MF6AE-3
4. TM 08407A-13/1, Refrigerated Container, Field, 8x8x10
5. TM 08713A-14&P/1, ERU-4E
6. TM 5-4130-237-14, Small Mobile Chiller, Section II

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7. TM 3080-50, Corrosion Control Procedures for Depot Maintenance Activities
8. TM 4120-15/1, Principal Technical Characteristics of U.S. Marine Corps Military Standard Air Conditioners, Section 5

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 3 - CORRECTIVE MAINTENANCE

TASK: 1161.3.1 DIAGNOSE AIR CONDITIONER/REFRIGERATION UNIT ELECTRICAL SYSTEM

CONDITION(S): Provided an air conditioner/refrigeration unit, refrigeration mechanic's tool set, and references.

STANDARD: The performer will diagnose the air conditioner/refrigeration unit electrical system so that all faulty conditions in the electrical system will be located per the references.

PERFORMANCE STEPS:

1. Review proper section of the references and schematic diagrams.
2. Inspect the air conditioner/refrigeration unit electrical system.
3. Troubleshoot faulty components.

REFERENCE(S):

1. TM 07579A, Direct Support, General Support and Depot Maintenance, Air Conditioner, Horizontal, Compact
2. TM 5-4120-243-14, Operator, Organizational, Direct Support and General Support Maintenance Manual, Air Conditioner Horizontal, 18000 BTU
3. TM 07664A, Air conditioner, Self Contained
4. TM 07227A, Operation and Service Instruction, Air conditioner, Self Contained
5. TM 5-4120-310-23P, Air conditioner, 36,000 BTU, Model AC36M
6. TM 06503C-14/1, Air Conditioner, 36,000 BTU, Model F36T4-2
7. TM 5-4120-288-15, Air conditioner, 54,000 BTU, Trane MAC4V60-5359-14
8. TM 07666A/B-15, Air conditioner, 9,000 BTU, 60HZ
9. TM 07710A/B, Operation and Maintenance Instructions, A/C type A/E32C-39
10. TM 08713A-14&P/1 ERU-4E
11. Appropriate Refrigeration Unit Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.2 REPLACE AIR CONDITIONER/REFRIGERATOR UNIT MECHANICAL COMPONENTS

CONDITION(S): Provided an air conditioner/refrigeration unit, refrigeration mechanic's tool set, refrigerant, recovery/recycling station, and references.

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STANDARD: The air conditioner/refrigeration unit will be replaced so that it will operate properly per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Recover the refrigerant of the air conditioner/refrigeration unit.
3. Replace faulty components.
4. Leak test air conditioner/refrigeration unit using CFC gas.
5. Charge air conditioner/refrigeration unit.
6. Test operate air conditioner/refrigeration unit.

REFERENCE(S):

1. TM 07579A, Direct Support, General Support and Depot Maintenance, Air Conditioner, Horizontal, Compact
2. TM 5-4120-243-14, Operator, Organizational, Direct Support and General Support Maintenance Manual, Air Conditioner Horizontal, 18000 BTU
3. TM 07664A, Air conditioner, Self Contained
4. TM 07227A, Operation and Service Instruction, Air conditioner, Self Contained
5. TM 5-4120-310-23P, Air conditioner, 36,000 BTU, Model AC36M
6. TM 06503C-14/1, Air Conditioner, 36,000 BTU, Model F36T4-2
7. TM 5-4120-288-15, Air conditioner, 54,000 BTU, Trane MAC4V60-5359-14
8. TM 07666A/B-15, Air conditioner, 9,000 BTU, 60HZ
9. TM 07710A/B, Operation and Maintenance Instructions, A/C type A/E32C-39
10. TM 08713A-14&P/1 ERU-4E
11. Appropriate Refrigeration Unit Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.3 REPLACE AIR CONDITIONER/REFRIGERATION UNIT ELECTRICAL COMPONENTS

CONDITION(S): Provided an air conditioner/refrigeration unit, electrical components, electrical tape, wiring, connectors, refrigeration mechanic's tool set, and references.

STANDARD: The air conditioner/refrigeration unit will be replaced so that it will operate properly per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Replace the facility air conditioner/refrigeration unit electrical components.
3. Operate unit to verify proper operation.
4. Document the maintenance performed.

REFERENCE(S):

1. TM 5-4120-243-14, Operator, Organizational, Direct Support and General Support Maintenance Manual, Air Conditioner Horizontal, 18000 BTU
2. TM 07664A, Air conditioner, Self Contained
3. TM 07227A, Operation and Service Instruction, Air conditioner, Self Contained
4. TM 5-4120-310-23P, Air conditioner, 36,000 BTU, Model AC36M
5. TM 06503C-14/1, Air Conditioner, 36,000 BTU, Model F36T4-2
6. TM 5-4120-288-15, Air conditioner, 54,000 BTU, Trane MAC4V60-5359-14
7. TM 07666A/B-15, Air conditioner, 9,000 BTU, 60HZ
8. TM 07710A/B, Operation and Maintenance Instructions, A/C type A/E32C-39
9. TM 08713A-14&P/1 ERU-4E
10. Appropriate Refrigeration Unit Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.4 REPAIR AIR CONDITIONER/REFRIGERATION TUBING

CONDITION(S): Provided an air conditioner/refrigeration unit, tubing, refrigeration mechanic's tool set, refrigerant, and references.

STANDARD: The air conditioner/refrigeration tubing will be replaced/repaired so that it will operate properly per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Diagnose tubing malfunction.
3. Replace/repair the faulty air conditioner/refrigeration tubing component.
4. Leak test air conditioner/refrigeration unit using CFC gas.
5. Charge air conditioner/refrigeration unit.
6. Test operate air conditioner/refrigeration unit.

REFERENCE(S):

1. TM 5-4120-243-14, Operator, Organizational, Direct Support and General Support Maintenance Manual, Air Conditioner Horizontal, 18000 BTU
2. TM 07664A, Air conditioner, Self Contained
3. TM 07227A, Operation and Service Instruction, Air conditioner, Self Contained
4. TM 5-4120-310-23P, Air conditioner, 36,000 BTU, Model AC36M
5. TM 06503C-14/1, Air Conditioner, 36,000 BTU, Model F36T4-2
6. TM 5-4120-288-15, Air conditioner, 54,000 BTU, Trane MAC4V60-5359-14
7. TM 07666A/B-15, Air conditioner, 9,000 BTU, 60HZ
8. TM 07710A/B, Operation and Maintenance Instructions, A/C type A/E32C-39

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9. Appropriate Refrigeration Unit Technical Manuals
10. Modern Refrigeration and Air Conditioning Text Book
11. TM 08713A-14&P/1 ERU-4E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.5 REPLACE AIR CONDITIONER AIR CIRCULATING SYSTEM

CONDITION(S): Provided an air conditioner, air circulating system, refrigeration mechanic's tool set, and references.

STANDARD: The air conditioner air circulating system will be replaced so that it will operate properly per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Assist in the replacement of the faulty air conditioner air circulating system.
3. Test operate to verify proper operation.

REFERENCE(S):

1. TM 07579A, Direct Support, General Support and Depot Maintenance, Air Conditioner, Horizontal, Compact
2. TM 5-4120-243-14, Operator, Organizational, Direct Support and General Support Maintenance Manual, Air Conditioner Horizontal, 18000 BTU
3. TM 07664A, Air conditioner, Self Contained
4. TM 07227A, Operation and Service Instruction, Air conditioner, Self Contained
5. TM 5-4120-310-23P, Air conditioner, 36,000 BTU, Model AC36M
6. TM 06503C-14/1, Air Conditioner, 36,000 BTU, Model F36T4-2
7. TM 5-4120-288-15, Air conditioner, 54,000 BTU, Trane MAC4V60-5359-14
8. TM 07666A/B-15, Air conditioner, 9,000 BTU, 60HZ
9. TM 07710A/B, Operation and Maintenance Instructions, A/C type A/E32C-39

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.6 CHARGE AIR CONDITIONER/REFRIGERATION UNIT

CONDITION(S): Provided an air conditioner/refrigeration unit, refrigeration mechanic's tool set, vacuum pump, recovery/recycle station, refrigerant, electronic leak detector or soap bubbles, and reference.

STANDARD: The air conditioner/refrigeration unit will be charged or recovered so that the refrigerant added will be the correct type for the particular unit, the correct amount will be added such that no bubbles will appear in sight glass, and there will be no leaks in the system per the reference. The air conditioner/refrigeration unit will be recovered so that there will be no refrigerant remaining in the air conditioner or refrigeration unit per the reference.

PERFORMANCE STEPS:

1. Review the appropriate reference.

2. Remove power from the air conditioner/refrigeration unit.
3. Recover system.
4. Vacuum the system.
5. Charge system with proper refrigerant.
6. Operate unit to verify proper operation.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS:

1. Performer must be EPA certified.
-

TASK: 1161.3.7 PERFORM AIR CONDITIONER/REFRIGERATION UNIT LIMITED TECHNICAL INSPECTION

CONDITION(S): Provided an air conditioner/refrigeration unit, refrigeration mechanic's tool set, Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment (NAVMC 10560), and the references.

STANDARD: The air conditioner/refrigeration unit limited technical inspection will be performed so that it will identify the maintenance status of the air conditioner/refrigeration unit, determine the proper echelon of maintenance, and the Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment (NAVMC 10560) will be completed per the references.

PERFORMANCE STEPS:

1. Review the appropriate TM for the unit being inspected.
2. Perform the Limited Technical Inspection.
3. Document the inspection on the Worksheet For Quarterly Preventive Maintenance and Technical Inspection For Engineer Equipment (NAVMC 10560).

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.8 REPAIR AUTOMOTIVE AIR CONDITIONER

CONDITION(S): Provided with an automotive air conditioner, refrigeration tool kit, test equipment, recovery/recycle machine, and the reference.

STANDARD: The automotive air conditioner will be repaired so that it will operate properly per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Diagnose the refrigeration system defect/fault.

3. Diagnose the electrical system defect/fault.
4. Repair the defect/fault.
5. Document the maintenance performed.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS:

1. Performer must be EPA certified
-

TASK: 1161.3.9 REPLACE ICE-CREAM PLANT MECHANICAL COMPONENTS

CONDITION(S): Provided an ice-cream plant, mechanical components, vacuum pump, recovery/recycle machine, refrigeration mechanic's tool set, and the references.

STANDARD: The ice-cream plant will be repaired so that it will operate properly with no leaks per the references.

PERFORMANCE STEPS:

1. Review the references.
2. Recover refrigerant.
3. Replace faulty components.
4. Charge refrigerant system.
5. Operate unit to verify proper operation.

REFERENCE(S):

1. TM 00934F-15/1, Plant, Ice Cream, 20 Quart Type III, Model M2070

ADMINISTRATIVE INSTRUCTIONS:

1. Performer must be EPA certified.
-

TASK: 1161.3.10 DIAGNOSE ICE FLAKE MACHINE ELECTRICAL SYSTEM

CONDITION(S): Provided an ice flake machine, refrigeration mechanic's tool box, and references.

STANDARD: The performer will diagnose the ice flake machine electrical system so that all faulty conditions in the electrical system will be located per the references.

PERFORMANCE STEPS:

1. Turn off ice flake machine and remove electric power.
2. Remove side panels.
3. Diagnose electrical system.
4. Replace side panels.

5. Reconnect electric power.
6. Test operate.

REFERENCE(S):

1. TM 00935F-15, Ice Making Machine, Flake, Model FAM-149A
2. TM 00935H-25/1, Ice Making Machine, Flake, Model MF6AE-3
3. TM 00935J-15/1, Ice Making Machine, Flake, Model 1600-FAE-263

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.11 REPLACE ICE-CREAM PLANT ELECTRIC MOTORS

CONDITION(S): Provided an ice-cream plant, refrigeration mechanic's tool set, electric motors, and the references.

STANDARD: The ice-cream plant electric motors will be replaced so that they will operate properly per the references.

PERFORMANCE STEPS:

1. Review the references.
2. Replace electric motors.
3. Operate ice-cream plant to verify proper operation.
4. Document the maintenance performed.

REFERENCE(S):

1. TM 00934F-15/1, Plant, Ice Cream, 20 Quart Type III, Model M2070 Chapter 3

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.12 DIAGNOSE REFRIGERATION UNIT MECHANICAL SYSTEM MALFUNCTION

CONDITION(S): Provided a refrigeration unit, refrigeration mechanic's tool set, leak detection device, recovery/recycle station, and reference.

STANDARD: The performer will diagnose the refrigeration unit mechanical system so that all faults will be located per the reference.

PERFORMANCE STEPS:

1. Review the references.
2. Diagnose refrigeration unit mechanical system malfunction.

REFERENCE(S):

1. TM 08713A-14&P/1, ERU-4E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.3.13 REPAIR SMALL MOBILE WATER CHILLER

CONDITION(S): Provided a Small Mobile Water Chiller, components, vacuum pump, recovery/recycle machine, refrigeration mechanic's tool set, tape, wire brush, electrical wire, connectors, and the reference.

STANDARD: The Small Mobile Water Chiller will be repaired so that it will operate normally with no leaks per the reference.

PERFORMANCE STEPS:

1. Review appropriate sections of the reference.
2. Diagnose small mobile water chiller malfunction.
3. Repair or replace components.
4. Test operate the Small Mobile Water Chiller and check for leaks.

REFERENCE(S): TM 5-4130-237-24P, Small Mobile Water Chiller

ADMINISTRATIVE INSTRUCTIONS:

1. Performer must be EPA certified.
-

DUTY AREA 4 - RECORDS, DOCUMENTS, AND PUBLICATIONS

TASK: 1161.4.1 COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATOR LOG AND SERVICE RECORD (NAVMC 10524)

CONDITION(S): Provided Consolidated Engineer Equipment Operator Log and Service Record (NAVMC 10524), the references, and Motor Vehicle and Engineer Equipment Record Folder (NAVMC 696D).

STANDARD: The Consolidated Engineer Equipment Operator Log and Service Record will be completed so that the descriptive data, scheduled preventive maintenance intervals, mileage, and hours of operation will be listed accurately and completely per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Complete Consolidated Engineer Equipment Operator Log and Service Record (NAVMC 10524).

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.4.2 COMPLETE ERO (NAVMC 10245)

CONDITION(S): Provided an ERO and references.

STANDARD: The ERO will be completed so that all relevant sections of the ERO will be accurately completed per type of service performed and the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review proper section(s) of equipment technical manual to obtain maintenance information.
3. Complete ERO.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.4.3 COMPLETE EROSL (NAVMC 10925)

CONDITION(S): Provided an EROSL and references.

STANDARD: The EROSL will be completed so that all relevant sections of the EROSL will be accurately completed per parts ordered and the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review appropriate stock list(s) to obtain information.
3. Complete EROSL.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate stock lists

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.4.4 COMPLETE WORKSHEET FOR PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560)

CONDITION(S): Provided a Worksheet for Preventive Maintenance and Technical Inspection for Engineer Equipment (NAVMC 10560) and references.

STANDARD: The Worksheet for Preventive Maintenance and Technical Inspection for Engineer Equipment will be completed and all repairs, services, and materials utilized to complete the scheduled maintenance services will be accurately recorded on the worksheet per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Complete Worksheet for Preventive Maintenance and Technical Inspection for Engineer Equipment (NAVMC 10560).

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REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.4.5 ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561)

CONDITION(S): Provided a Preventive Maintenance Roster and the reference.

STANDARD: The Preventive Maintenance Roster will be analyzed so that all relevant sections will be accurate per type of service performed per the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Analyze Preventive Maintenance Roster.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.4.6 REVIEW INSPECTION TAG (NAVMC 1018)

CONDITION(S): Provided a completed inspection tag and the reference.

STANDARD: The inspection tag will be reviewed to ensure that the tag is filled out accurately and completely per the reference.

PERFORMANCE STEPS:

1. Review proper section of the reference.
2. Review inspection tag.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.4.7 ANALYZE DPR

CONDITION(S): Provided a DPR, several ERO's, and the references.

STANDARD: The DPR will be analyzed to ensure that all sections of the report are filled out accurately and completely and the status of each piece of equipment is listed per information provided on ERO per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Review DPR.
3. Review the DTL's, SASSY transactions, and EROSL's.
4. Compare the information reviewed in Step 3 with that listed on the DPR.
5. Compile a list of discrepancies.
6. Submit list of discrepancies for correction.

REFERENCE(S):

1. UM 4790-5, MIMMS (AIS) FMSS
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 5 - PROGRAMS MANAGEMENT

TASK: 1161.5.1 SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT
INSTALLATION/OPERATION

CONDITION(S): Provided a mission, a camp layout, refrigeration and air conditioning equipment, installation crew with tools, and reference.

STANDARD: The refrigeration/air conditioning equipment installation will be supervised so that it will be installed safely and will operate per the reference.

PERFORMANCE STEPS:

1. Review the mission, camp layout, and the TM's for the refrigeration and air conditioning equipment being installed.
2. Brief installation crew, answer questions, make assignments, and discuss safety precautions.
3. Observe the installation process, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.
5. Ensure that refrigeration and air conditioning equipment is installed on time.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.5.2 SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT
PREVENTIVE MAINTENANCE

CONDITION(S): Provided installed refrigeration/air conditioning equipment, maintenance personnel with tools and repair parts, and reference.

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STANDARD: The refrigeration/air conditioning equipment preventive maintenance will be supervised so that all service is performed and deficiencies recorded per the reference.

PERFORMANCE STEPS:

1. Review the TM(s) for the refrigeration/air conditioning equipment receiving preventive maintenance.
2. Brief maintenance personnel on preventive maintenance to be performed, answer questions, and discuss safety precautions.
3. Observe the preventive maintenance, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.
5. Ensure documentation of maintenance performed.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.5.3 SUPERVISE REFRIGERATION/AIR CONDITIONING EQUIPMENT CORRECTIVE MAINTENANCE

CONDITION(S): Provided installed refrigeration/air conditioning equipment, maintenance personnel with tools and repair parts, and reference.

STANDARD: The refrigeration/air conditioning equipment corrective maintenance will be supervised so that all required services will be performed and deficiencies will be recorded per the reference.

PERFORMANCE STEPS:

1. Review the TM(s) for the refrigeration/air conditioning equipment receiving corrective maintenance.
2. Brief maintenance personnel on corrective maintenance to be performed, answer questions, and discuss safety precautions.
3. Observe the corrective maintenance, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.
5. Ensure documentation of maintenance performed.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.5.4 SUPERVISE CORROSION AND DETERIORATION CONTROL

CONDITION(S): Provided with material that is stored or used under conditions which are subject to corrosion or deterioration; paints, solutions, cleaning materials, coverings, and the reference.

STANDARD: All material subject to corrosion and/or deterioration will be supervised to protect/prevent loss or damage during storage or use per the reference.

PERFORMANCE STEPS:

1. Identify corrosion and/or deterioration control requirements.
2. Conduct a corrosion and/deterioration control program.

REFERENCE(S):

1. TM 3080-50, Corrosion Control Procedures for Depot Maintenance Activities

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1161.5.5 MANAGE HAZARDOUS WASTE AND MATERIAL CONTROL PROGRAM

CONDITION(S): Given applicable technical manuals and directives.

STANDARD: The hazardous waste and material control program will be managed so that all HAZMAT is stored, used, maintained and disposed of safely in both field and garrison working environment.

PERFORMANCE STEPS:

1. Review the established HAZMAT program.
2. Identify federal, state, and local EPA requirements.
3. Maintain the HAZMAT storage point.
4. Utilize required/recommended handling protection when working with HAZMAT.

REFERENCE(S):

1. 40 CFR 264.16, Resource Conservation and Recovery Act
2. 40 CFR 265.16, Resource Conservation and Recovery Act
3. 49 CFR 172.704(a)(1), Hazardous Material Regulations
4. 49 CFR 172.704(a)(3), Hazardous Material Regulations
5. DoD Instructions 6050.5
6. DoD Instructions 6050.5-G-1
7. 29 CFR 1900.120_

ADMINISTRATIVE INSTRUCTIONS:

1. Must be EPA certified.
-

MOS 1169, UTILITIES CHIEF

DUTY AREA 1 - MIMMS SUPERVISION

TASK: 1169.1.1 DIRECT MAINTENANCE ADMINISTRATION

CONDITION(S): Provided reference, maintenance resources, and appropriate maintenance directives.

STANDARD: Maintenance administration will be directed to support mission requirements per the reference.

PERFORMANCE STEPS:

1. Provide input to the unit MMSOP.
2. Conduct internal inspections program.
3. Plan, organize, and coordinate the use of maintenance resources.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.2 DIRECT UTILITIES EQUIPMENT MOS TRAINING PROGRAM

CONDITION(S): Provided with the references and a unit annual training plan.

STANDARD: The MOS training program will be directed to meet all mission requirements per the references.

PERFORMANCE STEPS:

1. Identify individual training requirements.
2. Identify unit training requirements.
3. Develop training program policies and procedures.
4. Plan a utilities equipment operator and maintenance training program.
5. Conduct the MOS training program.

REFERENCE(S):

1. MCO 1500.40, U.S. Marine Corps Training Philosophy, Priorities and Requirements
2. MCO P4790.2C, MIMMS Field Procedures Manual
3. MCO 3501.7A, MCCRES Volume VI
4. Unit T/O
5. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.3 DIRECT RECORDS AND FORMS

CONDITION(S): Provided with utilities equipment, appropriate records, forms, and references.

STANDARD: Records and forms will be directed to support the mission per the references.

PERFORMANCE STEPS:

1. Identify utilities equipment records requirements.
2. Identify maintenance records requirements.
3. Identify calibration control requirements.
4. Direct utilities equipment records.
5. Direct maintenance records.
6. Direct calibration control records.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO 5210.11D, Marine Corps Records Management Program
3. MCO 5213.7C, Marine Corps Forms Management Program
4. TM 4700-15/1, Equipment Record Procedures
5. UM 4790-5, MIMMS (AIS) FMSS
6. TI 4733-15/1, Calibration Requirements

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.4 DIRECT PUBLICATIONS

CONDITION(S): Provided with equipment and non-equipment related publications and the references.

STANDARD: Publications will be directed to support the mission per the references.

PERFORMANCE STEPS:

1. Identify requirements based on the mission and T/E.
2. Evaluate publications on hand.
3. Evaluate control procedures.
4. Evaluate NAVMC 10772 procedures.
5. Ensure deficiencies are corrected.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO P5215.17B, The USMC Tech Pub System
3. MCO P5600.31F, MAR COR Publications and Printing
4. NAVMC 2761, Catalog of Publications
5. Appropriate Stock Lists

6. Unit T/O
7. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.5 DIRECT UTILITIES EQUIPMENT AVAILABILITY

CONDITION(S): Provided with utilities equipment, maintenance resources, and references.

STANDARD: Equipment availability will be directed to support the mission per the references.

PERFORMANCE STEPS:

1. Identify the shortages/excesses.
2. Review readiness posture.
3. Review priority designator assignment.
4. Review maintenance cycle time.
5. Develop a plan to increase equipment availability.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO 3000.11, MARES Intro Policy Manual
3. MCBUL 3000, Table MARES Log Rpt SORTS
4. Unit T/O
5. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.6 DIRECT UTILITIES EQUIPMENT SECTION SUPPLY SUPPORT PROGRAM

CONDITION(S): Provided with MIMMS-AIS reports, appropriate equipment and non-equipment publications, and references.

STANDARD: Supply support will be directed to support the mission requirements per the references.

PERFORMANCE STEPS:

1. Coordinate repair parts support requirements with the unit supply officer.
2. Submit input for field budget requirements.
3. Direct/execute allocated funding.
4. Determine maintenance and operational float requirements.
5. Direct shop/section PEB and ERO layette procedures.
6. Direct shop/section validation/reconciliation procedures.

Appendix E to
ENCLOSURE (6)

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO P4400.82F, MIMMS Control Item Management Manual
3. MCO 4400.16G, UMMIPS
4. MCO 4400.150C, Consumer Level Supply Policy Manual
5. MCO P7100.8K, Field Budget Guidance Manual
6. TM 4700-15/1, Equipment Record Procedures
7. UM 4400-15, Organic Property Control Procedures
8. UM 4400-124, FMF SASSY Using Unit Procedures
9. UM 4790-5, MIMMS (AIS) FMSS
10. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.7 DIRECT SUPPORT AND TEST EQUIPMENT

CONDITION(S): Provided with support and test equipment and references.

STANDARD: Support and test equipment will be directed to support the mission per the references.

PERFORMANCE STEPS:

1. Determine support and test equipment assets and requirements.
2. Direct tool sets, chests, and kits.
3. Direct collateral equipment.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. MC(ML) (Microfiche)
4. Unit T/O
5. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.8 DIRECT PREVENTIVE MAINTENANCE PROGRAM

CONDITION(S): Provided with utilities equipment, maintenance resources, and references.

STANDARD: The preventive maintenance program will be directed to support the mission per the references.

PERFORMANCE STEPS:

1. Determine equipment PM requirements.

2. Develop preventive maintenance schedule.
3. Conduct the utilities equipment preventive maintenance program.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.9 DIRECT CORRECTIVE MAINTENANCE PROGRAM

CONDITION(S): Provided with utilities equipment, maintenance resources, MIMMS-AIS reports, and references.

STANDARD: The utilities equipment corrective maintenance program will be directed to support the mission per the references.

PERFORMANCE STEPS:

1. Determine corrective maintenance requirements.
2. Direct production control priorities.
3. Conduct utilities equipment corrective maintenance program.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.10 DIRECT MIMMS-AIS

CONDITION(S): Provided with MIMMS-AIS reports, supporting documentation, and references.

STANDARD: MIMMS-AIS reports will be directed per the requirements of the references.

PERFORMANCE STEPS:

1. Direct Daily Process Report.
2. Direct Daily Transaction Listing.
3. Direct Daily SASSY Transactions.
4. Direct Daily LM2 Report.
5. Direct Weekly TAM Report.
6. Direct Weekly Maintenance Exceptions Report.
7. Direct Weekly Material Report.

8. Direct Weekly LM2 Report.
9. Direct Weekly Shop Summary Report.
10. Direct Class II Reports (as required).

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. UM 4790-5, MIMMS (AIS) FMSS

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.11 DIRECT MAINTENANCE RELATED PROGRAMS

CONDITION(S): Provide with utilities equipment and references.

STANDARD: Maintenance related programs will be directed to support the mission per the references.

PERFORMANCE STEPS:

1. Determine requirements for maintenance related programs.
2. Direct modification control program.
3. Direct calibration control program.
4. Direct new equipment warranty program.
5. Direct Joint Oil Analysis Program (JOAP).
6. Direct Replacement and Evacuation program (R&E).
7. Direct Repair and Return program (R&R).
8. Direct Quality Deficiency program (QDR).
9. Direct Recoverable Items program (WIR).
10. Direct Quality Control (QC) program.
11. Direct Hazardous Material Program for batteries and solvents.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. MCO P4400.82F, MIMMS Control Item Management Manual
3. MCO 4105.2, USMC Warranty Procedures
4. MCO 4731.1A, Oil Analysis for Ground Equipment
5. MCO 4733.1A, USMC Test, Measurement and Diagnostic Equipment Calibration and Maintenance Program
6. TI 4710-14/1, Recovery and Evacuation Criteria USMC
7. TI 4731-14/1, USMC Oil Analysis Program
8. TI 4733-15/1, Calibration Requirements
9. Appropriate Engineer Equipment Material Fielding Plans (MCO's)

10. Appropriate Equipment Technical Manuals
11. Appropriate Stock Lists
12. MI Standards File
13. Unit T/E

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.1.12 ANALYZE DPR

CONDITION(S): Provided a DPR, several ERO's, and the references.

STANDARD: The DPR will be analyzed to ensure that all sections of the report are filled out accurately and completely and the status of each piece of equipment is listed per information provided on ERO per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Review DPR.
3. Review the DTL's, SASSY transactions, and EROSL's.
4. Compare the information reviewed in Step 3 with that listed on the DPR.
5. Compile a list of discrepancies.
6. Submit list of discrepancies for correction.

REFERENCE(S):

1. UM 4790-5, MIMMS (AIS) FMSS
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1169.2.1 DIRECT DUMMY LOAD OPERATION

CONDITION(S): Provided a generator set, a dummy load, an operator, and references.

STANDARD: The dummy load operation will be directed to ensure that it is operating properly per the references.

PERFORMANCE STEPS:

1. Review the references.
2. Ensure operator maintenance is being performed on schedule.
3. Ensure that all equipment is in safe condition and operated in a safe manner.
4. Ensure all reports are completed as required.

Appendix E to
ENCLOSURE (6)

REFERENCE(S):

1. TM 06870A-15, Dummy Load Electrical, Type DA-543/G, Operation and Maintenance
2. Appropriate Generator Set Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.2 DIRECT BARE BASE SHOWER FACILITY INSTALLATION/OPERATION

CONDITION(S): Provided a bare base unit set up and operating in the field and references.

STANDARD: The bare base unit operation will be directed so that it is determined that it is operating properly per the references.

PERFORMANCE STEPS:

1. Review the operation order and the references.
2. Direct the installation of the bath unit.
3. Ensure water has been tested by preventive medicine personnel.
4. Ensure drainage system is functioning properly.
5. Ensure operator maintenance is being performed on schedule.
6. Ensure all equipment is in safe condition and operated in a safe manner.
7. Ensure all reports are completed as required.

REFERENCE(S):

1. FM 10-280, Mobile Field Laundry, Clothing Exchange, and Bath Operations, Chapter 2
2. TM 0006A-14&P1, Shower Facility, Bare Base

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.3 DIRECT FLOODLIGHT SET INSTALLATION/OPERATION

CONDITION(S): Provided a mission, a floodlight set with a generator set, operator personnel, and references.

STANDARD: The floodlight set operation will be directed to ensure that it is operated so that all areas are lighted per the references.

PERFORMANCE STEPS:

1. Review the references.
2. Direct the installation of the floodlight set with a generator set.
3. Ensure operator maintenance is performed on schedule.
4. Ensure floodlight and generator set is in safe condition and operated in a safe manner.
5. Ensure area is lighted as per the mission.

REFERENCE(S):

1. TM 08857A-14/1, Floodlight Set, Skid Mounted with Tower (Model SM-4A3-0)
2. TM 05684C-12, Operator, Organizational Maintenance Manual, Generator Set, (Model MEP-003A)
3. TM 05684C-34, MEP 003A Generator Set
4. Appropriate Generator Set Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.4 DIRECT GENERATOR SET OPERATION

CONDITION(S): Provided a set up generator set, operator personnel, and the reference.

STANDARD: The generator set operation will be directed so that it will be operated properly per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Brief operator personnel on proper operating procedures, answer questions, and discuss safety precautions.
3. Observe the operation, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.

REFERENCE(S):

1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.5 DIRECT BARE BASE LAUNDRY FACILITY INSTALLATION/OPERATION

CONDITION(S): Provided a mission, a bare base laundry system, generator set, personnel, supplies, and references.

STANDARD: The bare base laundry operation will be directed so that laundry service is provided to the number of personnel and facilities specified in the mission per the references.

PERFORMANCE STEPS:

1. Review the references.
2. Direct the installation of the field laundry system to include required generator sets.
3. Write a laundry schedule specifying days and hours for pickup and delivery of laundry for units specified in the operations order.
4. Assign personnel to laundry duties and shifts.
5. Monitor use and replenishment of laundry supplies.
6. Observe laundry operation.
7. Identify and correct any unsafe or incorrect procedures/conditions.

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ENCLOSURE (6)

REFERENCE(S):

- 1. FM 10-280, Mobile Field Laundry, Clothing Exchange, and Bath Operations
- 2. TM 01243E-14/1, Laundry Facility, Bare Base
- 3. Appropriate Generator Set Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.6 DIRECT REFRIGERATION/AIR CONDITIONING EQUIPMENT
INSTALLATION/OPERATION

CONDITION(S): Provided a mission, a camp layout, refrigeration and air conditioning equipment, a generator set, an installation crew with tools, and reference.

STANDARD: The refrigeration/air conditioning equipment installation will be directed so that it will operate properly, all incorrect installation procedures and unsafe conditions will be noticed, and corrected per the reference.

PERFORMANCE STEPS:

- 1. Review the camp layout and the reference.
- 2. Brief installation crew, answer questions, make assignments, and discuss safety precautions.
- 3. Observe the installation process, correct deficiencies, and provide guidance in proper procedures.
- 4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.
- 5. Ensure that refrigeration and air conditioning equipment is installed on time.

REFERENCE(S):

- 1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.7 DIRECT CAMP SANITATION SYSTEM MAINTENANCE

CONDITION(S): Provided a mission, a camp sanitation system, and the references.

STANDARD: The camp sanitation system maintenance will be directed so that all operational and maintenance discrepancies will be identified per the references.

PERFORMANCE STEPS:

- 1. Review the references.
- 2. Inspect the camp sanitation system.
- 3. Identify all components not installed per the operations order.
- 4. Identify all components needing repair.
- 5. Identify all components needing cleaning.
- 6. Identify all components that have reached capacity and need to be closed.
- 7. Identify all discrepancies and coordinate with medical to ensure corrective action is taken.

REFERENCE(S):

1. FM 21-10, Field Hygiene and Sanitation
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.8 DIRECT ENVIRONMENTAL PROTECTION REGULATIONS COMPLIANCE

CONDITION(S): Provided environmental regulations, a list of restrictions, an environmental impact statement, an operation order, a camp in the field, personnel, and references.

STANDARD: The environmental protection regulation compliance will be directed so that all restrictions and regulations will be enforced, all accidents with environmental impact will be reported, and all personnel will be informed of environmental regulations and corrected when in violation per the references.

PERFORMANCE STEPS:

1. Comply with local environmental regulations, restrictions, and environmental impact statements.
2. Establish and promulgate policies for the operation and use of utilities equipment and sanitation facilities.
3. Inspect operation of all utilities facilities and sanitation facilities to ensure compliance with all regulations.
4. Correct all violations of existing regulations.
5. Report any violations or situations that require reporting.

REFERENCE(S):

1. MCO P11000.8, Environmental Management
2. Local Environmental Regulations

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.9 DIRECT PLANNING OF REFRIGERATION/AIR CONDITIONER SYSTEM

CONDITION(S): Provided an operation plan, a T/E, a T/O, utilities site reconnaissance report, and the references.

STANDARD: The planning for refrigeration/air conditioner systems will be directed to ensure that it will accommodate the number of Marines and facilities specified in the operation plan per the references.

PERFORMANCE STEPS:

1. Review the references.
2. Review the plan for the installation and operation of a refrigeration system and air conditioning system for a camp in the field.

REFERENCE(S):

1. TM 4120-15/1, Principal Technical Characteristics of U.S. Marine Corps Military Standard Air Conditioners
2. Appropriate Equipment Technical Manuals

Appendix E to
ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.10 DIRECT EQUIPMENT, TOOL SET, AND LIGHT SET INVENTORIES

CONDITION(S): Provided equipment, tool sets, light sets, appropriate stock lists, inventory personnel, and the references.

STANDARD: The equipment, tool set, and light set inventories will be directed so that all equipment, tools, and light set components are accounted for per the references.

PERFORMANCE STEPS:

1. Review the equipment, tool sets, and light sets to be inventoried.
2. Brief inventory team and make assignments.
3. Observe the inventory in progress to ensure that items are being inventoried properly.
4. Ensure that inventory proceeds according to schedule.
5. Ensure that all documentation is prepared properly and submitted.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. Appropriate Stock Lists

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.11 DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM INSTALLATION/RECOVERY

CONDITION(S): Provided a camp layout, a field electrical power generation and distribution system plan, generator sets, floodlight sets, general illumination light set, an installation crew equipped with lineman's tool set, a bus bar, tents, and the reference.

STANDARD: The field electrical power generation and distribution system installation will be directed so that power will be provided to each tent, each area will be lighted as specified for the camp layout, and the installation will conform to safety and wiring specifications per the reference.

PERFORMANCE STEPS:

1. Review the camp layout, applicable reference(s), and the electrical power generation and distribution system plan.
2. Brief the installation crew on the installation plan, answer questions, make assignments, discuss specific safety precautions, and provide team with schedule for installation.
3. Observe the electrical power generation and distribution system installation, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.
5. Ensure that installation proceeds according to schedule.
6. Inspect installed field electrical power generation and distribution system to ensure proper installation and operation.
7. Observe the electrical power generation and distribution system recovery and provide guidance in proper procedures.

REFERENCE(S):

1. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.12 DIRECT FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM OPERATION/MAINTENANCE

CONDITION(S): Provided a mission, an operating field electrical power generation and distribution system, operators, a camp layout, a field electrical power generation and distribution system plan, and the reference.

STANDARD: The field electrical power generation and distribution system operation will be directed so that it will operate normally, safely, and will provide electrical power to all facilities specified in mission as per the reference.

PERFORMANCE STEPS:

1. Review the mission, field electrical power generation and distribution system plan, and the reference.
2. Examine the electrical power generation and distribution system to identify problem areas.
3. Brief operator personnel, answer questions, make assignments, discuss specific safety precautions, and provide an operation schedule.
4. Observe field electrical power generation and distribution system operation, correct any deficiencies, and provide guidance in proper proper procedures.
5. Ensure that all safety rules are observed, correct violations, and identify and correct unsafe situations.
6. Ensure corrective action is taken when problems arise.

REFERENCE(S):

1. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.13 DIRECT INTERIOR WIRING INSTALLATION

CONDITION(S): Provided a structure, an installation crew equipped with a lineman's tool set, a bill of material, all material listed on the bill of material, and the reference.

STANDARD: The interior wiring installation will be directed so that the structure will be wired per the construction blueprints and will be completed on time and safely per the reference.

PERFORMANCE STEPS:

1. Review the construction blueprints.
2. Brief the installation crew, answer questions, make assignments, discuss specific safety precautions, and provide crew with installation schedule.
3. Observe the electrical wiring in progress, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that all safety precautions are followed, correct violations, and identify and correct unsafe situations.
5. Ensure that wiring installation proceeds according to schedule.

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ENCLOSURE (6)

6. Inspect installed wiring system.

REFERENCE(S):

1. National Electrical Code

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.14 DIRECT PLUMBING REPAIRS

CONDITION(S): Provided a structure requiring repairs to the plumbing system, a repair crew with tools, repair parts, and the reference.

STANDARD: The plumbing repairs will be directed so that all plumbing fixtures, drains, and fittings will work properly and there will be no leaks per the reference.

PERFORMANCE STEPS:

1. Examine the plumbing system needing repairs.
2. Brief the repair crew on the types of repairs to be made, answer questions, make assignments, discuss specific safety precautions, and inform crew of schedule for repairs.
3. Observe the repairs in progress, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that safety precautions are observed, correct violations, and identify and correct unsafe situations.
5. Ensure that all repairs are performed according to schedule.
6. Inspect completed plumbing system repairs.

REFERENCE(S):

1. TM 5-551, Plumbing and Pipefitting

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.15 DIRECT PLUMBING SYSTEM INSTALLATION

CONDITION(S): Provided plumbing construction prints, plumbing fixtures, drains, fittings, pipes, an installation crew with tools, a structure, and the reference.

STANDARD: The plumbing system installation will be directed so that the plumbing system will function as designed and all fixtures will be installed correctly with no leaks per the reference.

PERFORMANCE STEPS:

1. Review plumbing construction prints.
2. Brief the plumbing installation crew, answer questions, make assignments, discuss safety precautions, and inform them of schedule requirements.
3. Observe the plumbing installation, correct deficiencies, and provide guidance in proper procedures.
4. Ensure that all plumbing fixtures are installed properly.
5. Ensure that all fixtures required by the construction prints are installed.
6. Ensure that safety rules are observed, correct violations, and identify and correct unsafe situations.

7. Ensure that installation proceeds according to schedule.
8. Inspect the installed plumbing system.

REFERENCE(S):

1. TM 5-551, Plumbing and Pipefitting

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.16 DIRECT WASTE DISPOSAL/LATRINE SITE CLOSING AND MARKING

CONDITION(S): Provided a sanitation system for a camp in the field, a map, personnel, local environmental regulations, and the references.

STANDARD: The waste disposal/latrine site closing and marking will be directed so that all heads, latrines, and waste disposal sites will be closed, comply with local EPA regulations, be marked, and recorded on the map per the references.

PERFORMANCE STEPS:

1. Review the local EPA regulations.
2. Brief the work crew, answer questions, make assignments, discuss safety precautions, and inform crew of schedule.
3. Specify which waste disposal or latrine sites will be closed and marked.
4. Specify closing procedures for each waste disposal or latrine site.
5. Observe the closing and marking of each waste disposal and latrine site, correct deficiencies, and provide guidance in proper procedures.

REFERENCE(S):

1. FM 21-10, Field Hygiene and Sanitation
2. Local Environmental Regulations

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.17 DIRECT BARE BASE SHOWER FACILITY PLANNING

CONDITION(S): Provided an operation plan, a camp layout, and references.

STANDARD: The planning for a bare base shower facility will be directed so that the system will accommodate the number of Marines specified in the operation plan per the references.

PERFORMANCE STEPS:

1. Review the operation plan, camp layout, and references.
2. Direct the planning for the installation and operation of a field bath system.

REFERENCE(S):

1. FM 10-280, Mobile Field Laundry, Clothing Exchange, and Bath Operations, Chapter 2
2. TM 0006A-14&P1, Shower Facility, Bare Base

3. Appropriate Generator Set Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.2.18 DIRECT PREPARATION OF UTILITIES EQUIPMENT FOR TRANSPORTATION

CONDITION(S): Provided an operation order specifying type of transportation required, specific utilities equipment to be transported, a working crew, and references.

STANDARD: The preparation of utilities equipment for transportation will be directed so that all specified utilities equipment will be properly disassembled, stowed, packed, or prepared for transportation as specified in the operation order per the references.

PERFORMANCE STEPS:

1. Inspect utilities equipment requiring transportation.
2. Ensure that the working crew is properly briefed on the mission.
3. Observe the utilities equipment preparation.
4. Ensure that proper coordination is made for all transportation requirements are specified.
5. Ensure that safety precautions are observed.
6. Ensure that transportation proceeds according to schedule.

REFERENCE(S):

1. FMFM 4-6, Movement of Units in Air Force Aircraft
2. Joint Pub 3-02.1, Amphibious Embarkation
3. TM 55-601, Railcar Loading Procedures
4. FM 20-22, Vehicle Recovery Procedures
5. FM 21-305, Manual for Wheeled Vehicles
6. FM 55-9, Unit Air Movement Planning
7. FM 55-15, Transportation Reference Data
8. FM 101-10-1, Organizational, Technical and Logistical Data
9. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 3 - NON-EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1169.3.1 OBSERVE ELECTRICAL LOAD BALANCING

CONDITION(S): Provided a field electrical power generation and distribution system, a multimeter, an amprobe, a diagram of the system, power requirements of all items connected to the system, and references.

STANDARD: The electrical load balancing will be observed so that the electrical power generation and distribution system will be within 10 percent when computed with the following formula:

$$\% \text{ unbalance} = (1 - \frac{\text{Pmin phase}}{\text{Pmax phase}}) \times 100$$

PERFORMANCE STEPS:

1. Examine the distribution system to determine power consumption of phases and components.
2. Ensure power is measured accurately on all phases.
3. Ensure calculation of percent (%) of unbalance is correct.
4. Examine plan for redistribution of loads.
5. Ensure percent (%) of unbalance is less than 10 percent (%) after redistribution.
6. Ensure power is measured accurately on all phases after redistribution.
7. Ensure calculation of percent (%) of unbalance is correct after redistribution.

REFERENCE(S):

1. TM 11310-15/1, Alternating Current Power Requirements
2. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.3.2 CONDUCT UTILITIES SITE RECONNAISSANCE

CONDITION(S): Provided a map of the area, operation order, grid coordinates to be reconnoitered, a compass, reconnaissance team members, an Engineer Reconnaissance Report (DA 1712R), and references.

STANDARD: The utilities site reconnaissance will be conducted so that the utilities and facilities specified in the operation order will be correctly marked on the map and the Engineer Reconnaissance Report (DA 1712R) and will be correctly completed per the references.

PERFORMANCE STEPS:

1. Review the map of the area to be reconnoitered.
2. Brief the team members.
3. Accompany the team from point of origin to proposed utilities site.
4. Ensure that utilities sites are examined and the map is marked with the suggested locations of the equipment and facilities.
5. Ensure that site conditions are evaluated and recorded properly.
6. Ensure team members perform the following:
 - a. Draw a sketch of the area showing locations of all facilities.

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- b. Describe and sketch developments needed for installation.
 - c. Estimate requirements for installation.
7. Ensure Engineer Reconnaissance Report (DA 1712R) is completed properly.

REFERENCE(S):

- 1. FM 10-52, Field Water Supply
- 2. FM 20-31, Electric Power Generation in the Field
- 3. FM 21-10, Field Hygiene and Sanitation
- 4. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 4 - PROGRAMS MANAGEMENT

TASK: 1169.4.1 ANALYZE CHANGING WATER SUPPLY SITUATION

CONDITION(S): Provided a mission, a water supply system plan, completed Water Reconnaissance Reports (DA-1712R) for all potential water sources, a map of the area, a change in the water supply or in the mission, and the reference.

STANDARD: The changing water supply situation will be analyzed so that alternate water sources will be listed, the amount of time required to move to new water source, logistical impact of moving to new source, personnel, equipment needed, and will specify all possible alternatives for providing the required amount of water for the number of Marines specified per the reference.

PERFORMANCE STEPS:

- 1. Review the water supply system plan, the completed Water Reconnaissance Reports (DA-1712R), and the map of the area.
- 2. Analyze alternatives for providing sufficient water to a camp in the field.

REFERENCE(S):

- 1. FM 10-52, Field Water Supply

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.2 PLAN CAMP SANITATION SYSTEM

CONDITION(S): Provided a mission, an environmental impact report, a map of the area, a utilities reconnaissance report, and the reference.

STANDARD: The camp sanitation system will be planned so that it will support the number of personnel and facilities specified per the reference.

PERFORMANCE STEPS:

- 1. Analyze the utilities site reconnaissance report.
- 2. Identify quantity, types and locations of grease traps, heads/latrines, garbage pits, and soakage pits.

3. Identify engineer equipment required for installation.
4. Identify installation and operator personnel requirements.
5. Ensure a Bill of Materials (BOM) is submitted.
6. Ensure a schedule of inspections is established, to include preventive medicine.
7. Draw a drainage diagram.

REFERENCE(S):

1. FM 21-10, Field Hygiene and Sanitation

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.3 DIRECT CAMP SANITATION SYSTEM INSTALLATION

CONDITION(S): Provided a mission, an environmental impact report, a map of the area, a camp layout, a list of sanitation devices, an installation area, tools, and the reference.

STANDARD: The camp sanitation system construction will be directed so that the appropriate sanitation assets will be installed at the location and times specified in the mission for the construction of the camp sanitation system specified per the reference.

PERFORMANCE STEPS:

1. Review the mission, camp layout, and reference.
2. Brief the installation crew, answer questions, make assignments, and discuss safety precautions.
3. Direct the installation process.
4. Ensure that all sanitation devices are installed safely and within specified time frames of the mission.
5. Inspect completed camp sanitation system and ensure discrepancies are corrected.

REFERENCE(S):

1. FM 21-10, Field Hygiene and Sanitation

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.4 DIRECT WATER SUPPLY SYSTEM CONSTRUCTION

CONDITION(S): Provided a mission, an environmental impact report, a water supply system plan, and the reference.

STANDARD: The water supply system construction will be directed so that appropriate construction assets will be arranged to be at the location and times specified in the mission for the construction of the water supply system per the reference.

PERFORMANCE STEPS:

1. Review the mission.
2. Ensure proper coordination is made with the Combat Engineers and Engineer Equipment Officer to arrange for construction of the water supply system.
3. Direct construction.

4. Inspect completed water supply system and ensure that discrepancies are corrected.

REFERENCE(S):

1. FM 10-52, Field Water Supply

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.5 ESTABLISH FIELD MAINTENANCE FACILITY

CONDITION(S): Provided a mission and references.

STANDARD: The field maintenance facility will be established per the references.

PERFORMANCE STEPS:

1. Review the mission and the references.
2. Develop the physical layout of the maintenance facility.
3. List equipment, tools, and personnel requirements.
4. Establish guidelines for shop operation.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.6 DIRECT FIELD MAINTENANCE FACILITY

CONDITION(S): Provided maintenance personnel, utilities equipment, maintenance documents, and references.

STANDARD: The field maintenance facility will be directed so that all phases of the maintenance facility will be supervised, including maintenance management functions, resources, maintenance production, and maintenance production per the TM's for equipment maintained, and the references.

PERFORMANCE STEPS:

1. Review guidance in maintenance management.
2. Direct maintenance management resources.
3. Direct maintenance production.
4. Direct maintenance information.

REFERENCE(S):

1. MCO P4790.2C, MIMMS Field Procedures Manual
2. TM 4700-15/1, Equipment Record Procedures
3. UM 4790-5, MIMMS (AIS) FMSS

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.7 DIRECT SAFETY PROGRAM

CONDITION(S): Provided utilities equipment shop/section and resources and references.

STANDARD: The safety program will be directed so that health and safety within the shop/section is maintained per the references.

PERFORMANCE STEPS:

1. Identify equipment safety requirements.
2. Identify personnel safety requirements.
3. Direct maintenance shop safety program.
4. Direct utilities equipment operators safety program.
5. Direct safety industrial health program.

REFERENCE(S):

1. MCO P5100.8D, Marine Corps Ground Occupational Safety and Health Program
2. MCO 5100.19C, USMC Traffic Safety Program
3. MCO 5101.8D, USMC Ground Mishap Reporting
4. NAVMC 2692, Safety Program Management Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.8 DIRECT UNIT TRAINING PROGRAM

CONDITION(S): Provided a utilities platoon, training plan, local SOP, and reference.

STANDARD: The training program will be directed per the reference.

PERFORMANCE STEPS:

1. Ensure training plan is consistent with individual and collective training standards.
2. Determine coordination required to execute training plan.
3. Determine if adequate time is scheduled for each training event.
4. Ensure completed training is documented.

REFERENCE(S):

1. FMFMRP 0-1, Unit Training Management Guide

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.9 ANALYZE NEW EQUIPMENT FOR TRAINING REQUIREMENTS

CONDITION(S): Provided an ULSS for proposed utilities equipment and a unit training plan.

STANDARD: New equipment for training requirements will be analyzed so that all training requirements will be evaluated for introduction of the equipment the unit.

PERFORMANCE STEPS:

1. Examine the ULSS.
2. Examine the training plan.
3. Determine modifications needed to incorporate the new equipment into the training plan.

REFERENCE(S): None.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.10 DIRECT UTILITIES EQUIPMENT EMBARKATION PROGRAM

CONDITION(S): Provided utilities equipment, a T/E, SEMS reports, local SOP, and references.

STANDARD: The utilities equipment embarkation program will be directed to ensure that the SEMS report and the assigned equipment are in agreement, and all assigned equipment has current markings as required by the local SOP.

PERFORMANCE STEPS:

1. Review the references.
2. Ensure that the procedures for validating and correcting the SEMS report are adequate.
3. Inspect assigned utilities equipment and compare equipment with the SEMS report, identifying any discrepancies.
4. Ensure all discrepancies between equipment and the SEMS report are corrected.

REFERENCE(S):

1. Joint Pub 3-02.2, Joint Doctrine for Amphibious Embarkation
2. FMFM 4-3, Landing Support Operations
3. FMFM 4-6, Movement of Units in Air Force Aircraft
4. Unit SEMS Report

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.11 DIRECT WATER PURIFICATION/STORAGE SYSTEM OPERATION

CONDITION(S): Provided a mission, an operating water purification/storage system, operator personnel, and references.

STANDARD: The water purification/storage system will be directed to ensure that water is being produced in quantities required to support the number of personnel and facilities per the references.

PERFORMANCE STEPS:

1. Inspect water purification/storage system operation.
2. Identify all operational discrepancies and specify corrective action required.
3. Identify and correct all unsafe conditions.

4. Ensure water quantity and quality meet requirements.
5. Ensure adequate personnel are assigned to water purification/storage operations.
6. Ensure all water purification/storage system equipment receives adequate operator maintenance.
7. Ensure all water production reports and logs are properly completed and submitted.
8. Ensure that water production changes to meet changing requirements.

REFERENCE(S):

1. TM 5-4610-215-10, Water Purification Unit, Reverse Osmosis 600 GPH Trailer Mounted, Model ROWPU 600-1 and 600-3
2. FM 10-52, Field Water Supply

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.12 PLAN FIELD ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEM

CONDITION(S): Provided a mission, map, camp layout, a utilities site reconnaissance report, a T/E, a T/O, and references.

STANDARD: The field electrical power generation and distribution system will be planned so that it will provide electrical power of the voltage, current, and frequency specified for the number and locations of tents and facilities specified per the references.

PERFORMANCE STEPS:

1. Review the mission, map, T/E, T/O, applicable references, and camp layout.
2. Analyze the utilities site reconnaissance report.
3. Write a plan for the installation and operation of a field electrical power generation and distribution system for a camp in the field.

REFERENCE(S):

1. TM 5-765, Electric Power Transmission and Distribution
2. FM 20-31, Electric Power Generation in the Field
3. TM 11310-15/1, Alternating Current Power Requirements
4. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.13 PLAN FIELD LAUNDRY OPERATION

CONDITION(S): Provided a mission, a utilities site reconnaissance report, and the reference.

STANDARD: The field laundry operation will be planned so that it will provide laundry support for the number of personnel and facilities per the reference.

PERFORMANCE STEPS:

1. Review the mission and the reference.
2. Analyze the utilities site reconnaissance report.

3. Write a plan for the operation of a field laundry unit.

REFERENCE(S):

1. FM 10-280, Mobile Field Laundry, Clothing Exchange, and Bath Operations

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.14 PLAN MOVEMENT OF WATER POINTS

CONDITION(S): Provided a mission, reconnaissance reports for alternate sites, a map, and the reference.

STANDARD: The movement of water points will be planned so that it will provide for moving water production operations from one water point to another per the reference.

PERFORMANCE STEPS:

1. Review the mission and the map.
2. Analyze the reconnaissance reports.
3. Write a plan for moving water purification and storage facilities from one water point to another.

REFERENCE(S):

1. FM 10-52, Field Water Supply

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.15 PLAN PLUMBING SYSTEM

CONDITION(S): Provided construction blueprints and the reference.

STANDARD: The plumbing system will be planned so that it will provide for the installation of all plumbing facilities specified in the construction blueprint per the reference.

PERFORMANCE STEPS:

1. Review the construction blueprint and the reference.
2. Write a plan for the installation of a plumbing system for a structure.

REFERENCE(S):

1. TM 5-551, Plumbing and Pipefitting

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.16 PLAN WATER PURIFICATION/STORAGE SYSTEM

CONDITION(S): Provided a mission, a completed Water Reconnaissance Report (DA-1712R), a map of the area, a T/E, a T/O, and the reference.

STANDARD: The water purification/storage system will be planned to provide the quantity of water and for the number of personnel and facilities specified per the reference.

PERFORMANCE STEPS:

1. Review the mission, T/E, T/O, the map of the area, and the reference.
2. Analyze the Water Reconnaissance Report (DA-1712R).
3. Write a plan for the installation and operation of a field water purification/storage system.

REFERENCE(S):

1. FM 10-52, Field Water Supply

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.17 PLAN INTERIOR ELECTRICAL WIRING SYSTEM DESIGN

CONDITION(S): Provided electrical blueprints for a structure and the reference.

STANDARD: The interior electrical wiring system design will be reviewed so that it will ensure that the blueprints are sufficient for the installation of all specified circuits and conform to the reference.

PERFORMANCE STEPS:

1. Examine and approve/disapprove electrical blueprints for a structure.
2. Ensure that blueprints provide for the following conditions:
 - a. Electrical load is balanced.
 - b. All lighting and power requirements are met.
 - c. Safety and code specifications are met.

REFERENCE(S):

1. National Electrical Code

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.18 INSPECT INTERIOR ELECTRICAL WIRING SYSTEM

CONDITION(S): Provided a structure with installed interior electrical wiring system, an amprobe, a multimeter, the construction plans for the electrical wiring of the structure, and the reference.

STANDARD: The interior electrical wiring system will be inspected to ensure that it is installed per the structure plans, and the reference.

PERFORMANCE STEPS:

1. Examine the building plans.
2. Inspect the wiring system.
3. Identify all components not wired to the structure plans.
4. Identify any missing components.
5. Identify any unsafe conditions.
6. List all discrepancies identified and specify corrective action required for each discrepancy.

REFERENCE(S):

- 1. National Electrical Code

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.19 CONDUCT ELECTRICAL SAFETY TRAINING

CONDITION(S): Provided a field electrical power generation and distribution system plan, personnel using the system, and references.

STANDARD: The electrical safety training will be conducted so that the location of "off limits" areas, meaning of warning signs, prohibited electrical equipment and reasons, prohibited practices and reasons, emergency procedures, and unsafe conditions are identified per the references.

PERFORMANCE STEPS:

- 1. Review system plan.
- 2. Review applicable section(s) of the references.
- 3. Deliver the training to applicable personnel.

REFERENCE(S):

- 1. TM 5-765, Electric Power Transmission and Distribution
- 2. FM 20-31, Electric Power Generation in the Field

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.20 PREPARE COST/DATE/EXPENDITURE RECORDS

CONDITION(S): Provided a record-keeping file, cost-accounting sheet, pencil, expense receipts, and an operating budget.

STANDARD: The cost/date/expenditure records will be prepared so that all operating costs will be listed across cost-accounting sheet in designated categories, all expenses will be listed, noting date, amount and nature of expense, and expense receipts will be filed in record-keeping file in designated categories.

PERFORMANCE STEPS:

- 1. Gather materials.
- 2. List operating budget across cost-accounting sheet.
- 3. List expenses in appropriate columns on cost-accounting sheet.
- 4. Set up record-keeping file.
- 5. File expense receipts in record-keeping file.

REFERENCE(S): None.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.21 REVIEW INSPECTION TAG (NAVMC 1018)

CONDITION(S): Provided a completed inspection tag and the reference.

STANDARD: The inspection tag will be reviewed to ensure that the tag is filled out accurately and completely per the reference.

PERFORMANCE STEPS:

1. Review proper section of the reference.
2. Review inspection tag.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.22 DIRECT REQUISITION OF SHOP SUPPLIES

CONDITION(S): Provided references and applicable supply forms.

STANDARD: The requisition of shop supplies will be supervised so that all authorized supplies requested will be ordered and all requests and supply receipts will be maintained in designated area per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Supervise the requisition of shop supplies.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4400-124, FMF SASSY Using Unit Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.23 SUPERVISE CORROSION AND DETERIORATION CONTROL

CONDITION(S): Provided with material that is stored or used under conditions which are subject to corrosion or deterioration; paints, solutions, cleaning materials and coverings, and the reference.

STANDARD: All material subject to corrosion and/or deterioration will be supervised to protect/prevent loss or damage during storage or use per the reference.

PERFORMANCE STEPS:

1. Identify corrosion and/or deterioration control requirements.
2. Conduct a corrosion and/deterioration control program.

REFERENCE(S):

1. TM 3080-50, Corrosion Control Procedures for Depot Maintenance Activities

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1169.4.24 ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561)

CONDITION(S): Provided a Preventive Maintenance Roster and the reference.

STANDARD: The Preventive Maintenance Roster will be analyzed so that all relevant sections will be accurate per type of service performed per the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Analyze Preventive Maintenance Roster.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

MOS 1171, HYGIENE EQUIPMENT OPERATOR

DUTY AREA 1 - EQUIPMENT SET UP

TASK: 1171.1.1 SET UP/DISMANTLE WATER TANK

CONDITION(S): Provided a 3,000/20,000/50,000 gallon water tank with accessories, 500 gallon drum (water), repair kit, and water source, and the references.

STANDARD: The performer will assist in setting up/dismantling the 3,000/20,000/or 50,000 gallon water tank so that it will be level, have no leaks, assembled with all accessories in place, filled to top, a cover will be secured over tank such that no foreign matter can enter, all dirt and water will be removed before folding tank, the tank will be dismantled and folded without damage to it or its accessories, damaged tanks will be repaired to a serviceable condition, tanks will be super chlorinated prior to evacuating, and the cover will be removed, visually inspected, scrubbed, and dried as required per the references.

PERFORMANCE STEPS:

1. Prepare site for water tank.
2. Set up tank.
3. Check for leaks.
4. Repair leaks.
5. Conduct visual inspection.
6. Dismantle tank.

REFERENCE(S):

1. TM 01034D/1, Tank, Fab, Self Supporting
2. TM 5-4320-303-24, Tactical Water Distribution Equipment System (TWDS) Set, 10 Mile Segment, Chapter 2
3. TM 5-5430-211-13&P, Tank, Fabric, Collapsible, Pillow Type, 50,000 Gallon, Drinking Water
4. TM 5-5430-216-13&P, Tank, Fabric, Collapsible 20,000 Gallon, Water
5. TM 10-461--234-13, Water Distribution System
6. TM 10-8110-202-13&P, Drum, Fabric, Collapsible, 500 Gallon

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.1.2 INSTALL PLUMBING SYSTEMS

CONDITION(S): Provided plumbing materials, tools, plans, and the reference.

STANDARD: The plumbing systems will be installed so that there will be no leaks, dangerous connections, or other operational hazards per the reference.

PERFORMANCE STEPS:

1. Review applicable section of reference.
2. Review plans.
3. Install pipes, fixtures, sewers, drains, or heaters as needed.

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4. Test system.

REFERENCE(S):

1. TM 5-551, Plumbing and Pipefitting

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.1.3 SET UP/DISMANTLE SIXCON WATER TANK MODULE

CONDITION(S): Provided a Sixcon Water Tank Module, tools, and the references.

STANDARD: The performer will in set up/dismantle the Sixcon Water Tank Module so that it will be level and water will be available at the valve, the sixcon pump module will be setup/dismantled, cleaned and disinfected, as required, per the references.

PERFORMANCE STEPS:

1. Connect vertical stacks of two modules.
2. Connect modules horizontally.
3. Disconnect modules horizontally.
4. Disconnect vertical stacks of two modules.

REFERENCE(S):

1. TM-08990A-15&P/1, Sixcon Water Tank Module
2. TBMED 577, Occupational and Environmental Health Sanitary Control and Surveillance of Field Water Supplies

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.1.4 SET UP SANITATION FACILITIES

CONDITION(S): Provided tools, lumber, burlap, 55 gallon barrels, metal screening material, sand, gravel, and the references.

STANDARD: The sanitation facilities will be set up to function properly and to pass medical inspection per the references.

PERFORMANCE STEPS:

1. Select latrine sites.
2. Set up latrine sites.
3. Select waste disposal sites.
4. Set up waste disposal sites.

REFERENCE(S):

1. FM 21-10, Field Hygiene and Sanitation
2. EPA Standards

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.1.5 OPERATE FORWARD AREA WATER POINT SUPPLY SYSTEM (FAWPSS)

CONDITION(S): Provided with the components of the forward area water point supply system and the references.

STANDARD: The forward area water point supply system will be set up so that it will be installed properly without leaks and able to supply water to support the operation per the references.

PERFORMANCE STEPS:

1. Select distribution site.
2. Install water point system.
3. Distribute water.
4. Dismantle water point system.

REFERENCE(S):

1. TM 08922A-24P/2, Pump Unit, Centrifugal, Self-Priming, 125 GPM
2. TM 08936A-13&P, Forward Area Water Point Supply System
3. TM 08922A-14/1, Pump Unit, Centrifugal, Self-Priming, 125 GPM

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1171.2.1 OPERATE GPM PUMPS

CONDITION(S): Provided various pumps, oil, grease, fuel, and references.

STANDARD: The various pumps will be operated so that water will be pumped normally, safely, and per the applicable references.

PERFORMANCE STEPS:

1. Set up pump.
2. Operate pump.
3. Perform operator maintenance.
4. Disassemble and drain pump.

REFERENCE(S):

1. TM 08922A-14, Pump Unit, Centrifugal, Self-Priming, 125 GPM
2. TM 5-4320-200-14, Pump, Centrifugal, Gasoline and Electric Motor Driven
3. TM 5-4320-309-14, 125 GPM Pump
4. TM 5-4320-266-14, 350 GPM Pump
5. TM 5-4320-303-10, 600 GPM Pump

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6. Owner's Manual for specified pump

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.2.2 OPERATE BARE BASE SHOWER FACILITY

CONDITION(S): Provided a Bare Base Shower Facility with water heater, water source, fuel, access to an 1141 Electrician to wire up generator, if personnel are not trained to do so, and the references.

STANDARD: The Bare Base Shower Facility will be operated so that it will function normally, safely, and will not be damaged by the operation per the references.

PERFORMANCE STEPS:

1. Prepare site for Shower Facility.
2. Set up Shower Facility.
3. Start up generator set.
4. Operate the Shower Facility.
5. Perform operator maintenance.
6. Shut down generator set.
7. Dismantle Shower Facility.

REFERENCE(S):

1. TM 01034D/1, Tank, Fab, Self Supporting
2. TM 08444A-15/1, Operation and Overhaul Instructions
3. TM 10006A-14/P1, Shower Facility, Bare Base
4. Appropriate Generator Set Technical Manuals

ADMINISTRATIVE INSTRUCTIONS:

1. 1141 Electrician may be required to wire up generator.
-

TASK: 1171.2.3 OPERATE LAUNDRY FACILITY

CONDITION(S): Provided a Laundry Facility with accessories, access to an 1141 Electrician to wire up generator, if personnel are not trained to do so, water source, soiled laundry, detergent, bleach, fuel, and the references.

STANDARD: The Laundry Facility will be operated so that it will function normally, safely, and will not be damaged by the operation per the references.

PERFORMANCE STEPS:

1. Prepare site for laundry facility.
2. Set up laundry facility.
3. Receive laundry.
4. Tag laundry bags.

5. Maintain log.
6. Perform operator maintenance.
7. Connect and start the generator.
8. Operate the Laundry Facility.
9. Shut down the Laundry Facility.
10. Shut down the generator.

REFERENCE(S):

1. TM 01243E-14/1, Laundry Facility, Bare Base
2. TM 08444A-15/1, Operation and Overhaul Instructions
3. Appropriate Generator Set Technical Manuals

ADMINISTRATIVE INSTRUCTIONS:

1. 1141 Electrician may be required to wire up generator.
-

TASK: 1171.2.4 OPERATE REVERSE OSMOSIS WATER PURIFICATION UNIT (ROWPU)

CONDITION(S): Provided a Reverse Osmosis Water Purification Unit, a water quality analysis kit-purification, access to an 1141 Electrician to wire up generator, if personnel are not trained to do so, a watch, earplugs, developed water source, developed water point, and references.

STANDARD: The Reverse Osmosis Water Purification Unit will be operated so that it will function normally, safely, and will not be damaged by the operation per the references.

PERFORMANCE STEPS:

1. Install Reverse Osmosis Water Purification Unit tanks.
2. Start generator.
3. Operate ROWPU.
4. Perform turbidity test.
5. Perform operator maintenance.
6. Complete Daily Water Purification Log-ROWPU (DA Form 1713-1-R).
7. Complete Daily Water Distribution Log.
8. Shut down ROWPU.
9. Shut down generator.
10. Complete Water Point Daily Production Summary.
11. Complete water point Daily Distribution Summary.
12. Dismantle system.
13. Repack system for movement.

REFERENCE(S):

1. FM 10-52, Field Water Supply

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2. FM 10-52-1, Water Supply Point Equipment and Operations
3. FM 20-31, Electric Power Generation in the Field
4. FM 21-10, Field Hygiene and Sanitation
5. TM 08580A-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Skid Mounted
6. TM 08580C-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Trailer Mounted
7. TM 09241B-12&P, Water Quality Analysis Kit-Purification
8. TBMED 577, Occupational and Environmental Health Sanitary Control and Surveillance of Field Water Supplies
9. Appropriate Generator Set Technical Manuals

ADMINISTRATIVE INSTRUCTIONS:

1. 1141 Electrician may be required to wire up generator.
-

TASK: 1171.2.5 OPERATE SMALL MOBILE WATER CHILLER

CONDITION(S): Provided a Small Mobile Water Chiller, water source, and the reference.

STANDARD: The Small Mobile Water Chiller will be operated so that it will function normally, safely, and will not be damaged by the operation per the reference.

PERFORMANCE STEPS:

1. Set up the Small Mobile Water Chiller.
2. Operate the Small Mobile Water Chiller.
3. Conduct operator maintenance.
4. Shut down the Small Mobile Water Chiller.

REFERENCE(S):

1. TM 5-4130-237-14, Small Mobile Water Chiller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.2.6 OPERATE MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LMT

CONDITION(S): Provided a Medium Fresh Water Purification Unit, 3,000 LMT, water source, 3000 gallon tanks, pumps, fuel, and references.

STANDARD: The Medium Fresh Water Purification Unit will be operated so that it will function normally, safely, and will not be damaged by the operation per the references. The Operator shall produce a product water with a Nephelometric Turbidity Unit (NTU) of 1 or less. The product water shall have a chlorine residual of 5 parts per million (PPM) at production site.

PERFORMANCE STEPS:

1. Prepare site for Medium Fresh Water Purification Unit.
2. Set up Water Purification Unit.
3. Operate the Water Purification Unit.

4. Conduct operator maintenance.
5. Shut down the Water Purification Unit.

REFERENCE(S):

1. TM 01034D-12/P1, 3000 Gallon Tank
2. TM 09777A-14/1, Water Purification Systems
3. TM 09241B-12&P, Water Quality Analysis Set, Purification Model WQAS-1
4. TBMED 577 Occupational and Environmental Health Sanitary Control and Surveillance of Field Water Supplies
5. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.2.7 OPERATE DELOUSING UNIT

CONDITION(S): Provided with a delousing unit, fuel, and the reference.

STANDARD: The delousing unit will be operated so that the delousing agent is applied at the proper pressure and volume per the reference.

PERFORMANCE STEPS:

1. Install the unit.
2. Operate the unit.
3. Conduct operator maintenance.
4. Shut down delousing unit.
5. Disassemble the unit.

REFERENCE(S):

1. TM 10-4230-203-14, Delousing Unit

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.2.8 OPERATE TACTICAL WATER DISTRIBUTION SYSTEM

CONDITION(S): Provided with the components of the tactical water distribution system and the references.

STANDARD: The tactical water distribution system will be operated so that it will be installed and operate without leaks per the references.

PERFORMANCE STEPS:

1. Prepare site for tactical water distribution system.
2. Set up tactical water distribution system.
3. Operate tactical water distribution system.
4. Conduct operator maintenance.

5. Shut down tactical water distribution system.

REFERENCE(S):

1. TM 5-4320-303-24, Tactical Water Distribution System Set, 10 Mile Segment
2. FM 10-52-1, Water Supply Point Equipment and Operations
3. TM 10-4320-303-13, Tactical Water Distribution Equipment System (TWDS) Set, 10 Mile Segment

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 3 - NON-EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1171.3.1 DEVELOP WATER SOURCE

CONDITION(S): Provided a water source, pump, strainer, intake screen, digging tools, wood pickets or planks, sand bags, anchor, rope, or fuel drum as needed, and the references.

STANDARD: The water source will be developed so that a method will be selected and water can be extracted from source without complications per the references.

PERFORMANCE STEPS:

1. Develop source from a slow stream with high water level.
2. Develop source from a lake with high water level.
3. Develop source from a small, shallow stream or lake.
4. Develop source from a wide, shallow stream.
5. Develop source from a muddy stream.
6. Develop source from a shallow ground water.
7. Develop source from a spring.
8. Develop source from an offshore intake.
9. Develop source from a salt water well.

REFERENCE(S):

1. FM 10-52, Field Water Supply, Chapter 4
2. FM 10-52-1, Water Supply Point Equipment and Operations

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.3.2 DEVELOP WATER POINT

CONDITION(S): Provided a water point site, area map, field report, aerial photographs, water reconnaissance report, schedule of recommended site improvements, equipment and personnel requirements, and the references.

STANDARD: The water point will be developed so that enough water for using units will be produced, the water point will have sufficient space for trucks to move to and from the water source, the water point will have sufficient drainage so that the area does not become flooded, and the water point and hygiene equipment will be adequately concealed and guarded to reduce the chance of enemy attack per the references.

PERFORMANCE STEPS:

1. Review schedule of recommended site improvements.
2. Set up hygiene equipment and accessories.
3. Camouflage hygiene equipment and accessories.
4. Develop a drainage system.
5. Make traffic provisions.
6. Provide security.

REFERENCE(S):

1. FM 10-52, Field Water Supply, Chapter 4
2. FM 10-52-1, Water Supply Point Equipment and Operations

ADMINISTRATIVE INSTRUCTIONS:

1. The tactical situation and problems encountered at a given site will determine the order in which the water point is developed.
-

TASK: 1171.3.3 INSPECT WATER POINT

CONDITION(S): Provided a developed water point and the references.

STANDARD: The water point will be inspected so that it will identify any inadequacies in the camouflaging of equipment, concealment of the water point, traffic provisions, security, and drainage per the references.

PERFORMANCE STEPS:

1. Inspect hygiene equipment and accessories for adequate camouflage.
2. Inspect water point for adequate concealment.
3. Inspect traffic provisions.
4. Inspect security provisions.
5. Inspect drainage provisions.

REFERENCE(S):

1. FM 10-52, Field Water Supply, Chapter 4
2. FM 10-52-1, Water Supply Point Equipment and Operations

ADMINISTRATIVE INSTRUCTIONS:

1. (NONE)
-

TASK: 1171.3.4 PERFORM WATER RECONNAISSANCE

CONDITION(S): Provided a field environment with water sources, grid coordinates, yardstick, compass, pencils, paper, water reconnaissance reports, security, a vehicle, a helicopter or airplane, and the references.

STANDARD: The water reconnaissance will be performed so that a water source will be selected that can support field equipment and personnel, be developed and purified, and be concealed per the references.

PERFORMANCE STEPS:

1. Perform reconnaissance.
2. Perform water chlorine residual test.
3. Perform water sample pH value test.
4. Perform water sample total dissolved solids test.
5. Complete reconnaissance.
6. Complete water reconnaissance report.

REFERENCE(S):

1. FM 10-52, Field Water Supply
2. FM 10-52-1, Water Supply Point Equipment and Operations

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.3.5 PREPARE WATER DISTRIBUTION SCHEDULES

CONDITION(S): Provided unit roster, pen, paper, or board, and the references.

STANDARD: The water distribution schedules will be prepared so that no unit will be scheduled to be at the same water point at the same time as another unit per the references.

PERFORMANCE STEPS:

1. Determine time and type of distribution for each unit.
2. Determine the water point each unit is to use.
3. Schedule water distribution.

REFERENCE(S):

1. FM 10-52, Field Water Supply, Chapter 7
2. FM 10-52-1, Water Supply Point Equipment and Operations

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.3.6 PERFORM CORROSION AND DETERIORATION CONTROL

CONDITION(S): Provided with material that is stored or used under conditions which are subject to corrosion or deterioration; paints, solutions, cleaning materials and coverings, and the reference.

Appendix F to
ENCLOSURE (6)

STANDARD: All material subject to corrosion and/or deterioration will be performed to protect/prevent loss or damage during storage or use per the reference.

PERFORMANCE STEPS:

1. Identify corrosion and/or deterioration control requirements.
2. Perform corrosion and/deterioration control program activities.

REFERENCE(S):

1. TM 3080-50, Corrosion Control Procedures for Depot Maintenance Activities

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 4 - PREVENTIVE MAINTENANCE

TASK: 1171.4.1 PERFORM PUMP PREVENTIVE MAINTENANCE

CONDITION(S): Provided a pump, tools, personnel preventive maintenance roster, ERO, EROSL, and references.

STANDARD: The various pump preventive maintenance will be performed per schedule in the preventive maintenance roster, any deficiencies will be corrected/identified, and the ERO will reflect all required preventive maintenance action per the references.

PERFORMANCE STEPS:

1. Review references.
2. Complete ERO.
3. Perform preventive maintenance services.
4. Document the maintenance performed.

REFERENCE(S):

1. TM 08922A-14, Pump Unit, Centrifugal, Self-Priming, 125 GPM
2. TM 5-4320-200-14, Pump, Centrifugal, Gasoline and Electric Motor Driven

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.4.2 PERFORM SHOWER FACILITY PREVENTIVE MAINTENANCE

CONDITION(S): Provided a shower facility, tools, personnel preventive maintenance roster, ERO, EROSL, and references.

STANDARD: The shower facility preventive maintenance will be performed per schedule in the preventive maintenance roster, any deficiencies will be corrected/identified, and the ERO will reflect all required preventive maintenance action per the references.

PERFORMANCE STEPS:

1. Review references.
2. Complete ERO.
3. Perform preventive maintenance services.

- 4. Document the maintenance performed.

REFERENCE(S):

- 1. TM 10006A-14/P1, Shower Facility, Bare Base
- 2. TM 08444A-15/1, Operation and Overhaul Instructions

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.4.3 PERFORM LAUNDRY FACILITY PREVENTIVE MAINTENANCE

CONDITION(S): Provided a Laundry Facility, tools, personnel preventive maintenance roster, ERO, EROSL, and the references.

STANDARD: The laundry facility preventive maintenance will be performed per schedule in the preventive maintenance roster, any deficiencies will be corrected/identified, and the ERO will reflect all required preventive maintenance action per the references.

PERFORMANCE STEPS:

- 1. Review references.
- 2. Complete ERO.
- 3. Perform preventive maintenance services.
- 4. Document the maintenance performed.

REFERENCE(S):

- 1. TM 01243E-14/1, Laundry Facility, Bare Base
- 2. TM 08444A-15/1, Operation and Overhaul Instructions

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.4.4 PERFORM REVERSE OSMOSIS WATER PURIFICATION UNIT PREVENTIVE MAINTENANCE

CONDITION(S): Provided a Reverse Osmosis Water Purification Unit, tools, personnel preventive maintenance roster, ERO, EROSL, and the references.

STANDARD: Reverse osmosis water purification unit preventive maintenance will be performed per schedule in the preventive maintenance roster, any deficiencies will be corrected/identified, and the ERO will reflect all required preventive maintenance action per the references.

PERFORMANCE STEPS:

- 1. Review references.
- 2. Complete ERO.
- 3. Perform preventive maintenance services.
- 4. Document the maintenance performed.

REFERENCE(S):

- 1. TM 08580A-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Skid Mounted

2. TM 08580C-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Trailer Mounted

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.4.5 PERFORM SIXCON WATER TANK MODULE PREVENTIVE MAINTENANCE

CONDITION(S): Provided a Sixcon Water Tank Module, tools, personnel preventive maintenance roster, ERO, EROSL, and the reference.

STANDARD: The Sixcon Water Tank Module preventive maintenance will be performed per schedule in the preventive maintenance roster, any deficiencies will be corrected/identified, and the ERO will reflect all required preventive maintenance action per the reference.

PERFORMANCE STEPS:

1. Review reference.
2. Complete ERO.
3. Perform preventive maintenance services.
4. Document the maintenance performed.

REFERENCE(S):

1. TM-08990A-15&P/1, Sixcon Water Tank Module

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.4.6 PERFORM MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LMT PREVENTIVE MAINTENANCE

CONDITION(S): Provided Medium Fresh Water Purification Unit 3,000 LMT, tools, personnel preventive maintenance roster, ERO, EROSL, and the references.

STANDARD: The water purification unit preventive maintenance will be performed per schedule in the preventive maintenance roster, any deficiencies will be corrected/identified, and the ERO will reflect all required preventive maintenance action per the references.

PERFORMANCE STEPS:

1. Review references.
2. Complete ERO.
3. Perform preventive maintenance services.
4. Document the maintenance performed.

REFERENCE(S):

1. TM 09777A-14/1, Water Purification Systems
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 5 - CORRECTIVE MAINTENANCE

TASK: 1171.5.1 REPAIR GPM PUMPS

CONDITION(S): Provided an ERO, various faulty pumps, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and references.

STANDARD: The various pumps will be repaired to full operational capability, the ERO will be documented properly showing repair actions taken, and the pump units will be tested to verify proper operation per the references.

PERFORMANCE STEPS:

1. Review ERO to understand equipment problem as documented.
2. Review proper sections/chapters of the references.
3. Diagnose pump assembly malfunction.
4. Repair or replace faulty components.
5. Operate pump to verify proper operation.
6. Document repair action performed.

REFERENCE(S):

1. TM 5-4320-252-14, Pump, Reciprocating, Diaphragm 100 GPM
2. TM 5-2805-257-14, 100 GPM Pump Engine
3. TM 5-4320-309-14, 125 GPM Pump
4. TM 5-4320-200-15, 65 GPM Pump
5. TM 5-4320-200-13&P, 65 GPM Pump
6. TM 08922A-14/1, 125 GPM Pump
7. TM 5-4320-309-14, 125 GPM Pump
8. TM 10-4320-343-14, 350 GPM Pump
9. TM 10-4320-226-14, 350 GPM Pump
10. TM 10-4320-344-10, 600 GPM Pump
11. TM 10-4320-344-24, 600 GPM Pump

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.2 DIAGNOSE SHOWER FACILITY MALFUNCTION

CONDITION(S): Provided ERO, a faulty Shower Facility, an operable generator, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and references.

STANDARD: The performer will diagnose the Shower Facility so that all deficiencies will be identified, the echelon of maintenance determined, and an ERO initiated to show all corrective repair actions to be taken per the references.

PERFORMANCE STEPS:

1. Diagnose fuel pump malfunction.

2. Diagnose fuel burner system malfunction.
3. Diagnose water pump/components malfunction.
4. Diagnose temperature regulator valve malfunction.
5. Diagnose water delivery/drain system malfunction.
6. Document repair/replacement action required.
7. Initiate EROSL, if parts are required.

REFERENCE(S):

1. TM 08444A-15/1, Operation and Overhaul Instructions
2. TM 10006A-14/P1, Shower Facility, Bare Base

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.3 DIAGNOSE LAUNDRY FACILITY MALFUNCTION

CONDITION(S): Provided ERO, a faulty Laundry Facility, an operable generator, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the references.

STANDARD: The performer will diagnose the laundry facility so that all deficiencies will be identified, the echelon of authorized maintenance determined, and an ERO initiated to show all corrective actions to be taken per the references.

PERFORMANCE STEPS:

1. Diagnose air compressor malfunction.
2. Diagnose water pump malfunction.
3. Diagnose washer drive system malfunction.
4. Diagnose extractor brake assembly malfunction.
5. Diagnose water heater fuel burner system malfunction.
6. Diagnose dryer tumbler air return box assemblies malfunction.
7. Document repair/replacement actions required.
8. Initiate EROSL, if parts are required.

REFERENCE(S):

1. TM 08444A-15/1, Operation and Overhaul Instructions
2. TM 01243E-14/1, Laundry Facility, Bare Base

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.4 REPAIR PLUMBING SYSTEM

CONDITION(S): Provided plumbing materials, tools, plans, and the reference.

STANDARD: The plumbing system will be repaired so that there will be no leaks, dangerous connections, or other operations hazards per the reference.

PERFORMANCE STEPS:

1. Review proper section of the reference.
2. Diagnose plumbing malfunction.
3. Repair or replace faulty components.
4. Test operate entire plumbing system.

REFERENCE(S):

1. TM 5-551, Plumbing and Pipefitting

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.5 DIAGNOSE REVERSE OSMOSIS WATER PURIFICATION UNIT MALFUNCTION

CONDITION(S): Provided ERO, a faulty Reverse Osmosis Water Purification Unit, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and references.

STANDARD: The performer will diagnose the Reverse Osmosis Water Purification Unit so that all deficiencies will be identified, the echelon of authorized maintenance determined, and an ERO initiated to show all required actions to be taken per the references.

PERFORMANCE STEPS:

1. Diagnose reverse osmosis elements malfunctions.
2. Diagnose raw water, distribution and backwater pump malfunctions.
3. Diagnose reverse osmosis pump malfunctions.
4. Diagnose six way valve malfunctions.
5. Diagnose gauge malfunctions.
6. Diagnose chemical feed pump malfunctions.
7. Document repair/replacement actions required.
8. Initiate EROSL, if parts are required.

REFERENCE(S):

1. TM 08580A-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Skid Mounted
2. TM 08580C-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Trailer Mounted
3. TM 08580A-24&P/2
4. TM 08580B-24/3

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.6 DIAGNOSE SIXCON WATER TANK/PUMP MODULE MALFUNCTION

CONDITION(S): Provided ERO from owning unit, a faulty SixCon Water Tank/Pump Module, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the reference.

STANDARD: The performer will diagnose the SixCon Water Tank/Pump Module so that all deficiencies will be identified, the echelon of maintenance determined, and an ERO initiated to show all corrective actions to be taken per the reference.

PERFORMANCE STEPS:

1. Diagnose water drain valve assembly malfunctions.
2. Diagnose water level gauge malfunctions.
3. Diagnose manhole assembly malfunctions.
4. Diagnose hose reel assembly malfunctions.
5. Document repair/replacement actions required.
6. Initiate EROSL, if parts are required.

REFERENCE(S):

1. TM 08990A-15&P/1, Sixcon Water Tank Module

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.7 DIAGNOSE SMALL MOBILE WATER CHILLER MALFUNCTION

CONDITION(S): Provided ERO, a faulty Small Mobile Water Chiller, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the reference.

STANDARD: The performer will diagnose the Small Mobile Water Chiller so that all deficiencies will be identified, the echelon of maintenance determined, and an ERO will be initiated to show all corrective actions to be taken per the reference.

PERFORMANCE STEPS:

1. Diagnose water pump assembly malfunction.
2. Diagnose water valve malfunction.
3. Diagnose accessory pulley assembly malfunction.
4. Document repair/replacement actions required.
5. Initiate EROSL, if parts are required.

REFERENCE(S):

1. TM 5-4130-237-14, Small Mobile Water Chiller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.8 DIAGNOSE MEDIUM FRESH WATER PURIFICATION UNIT, 3,000 LMT MALFUNCTION

CONDITION(S): Provided ERO, a faulty Medium Fresh Water Purification Unit, 3,000 LMT, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the reference.

STANDARD: The performer will diagnose the Water Purification Unit so that all deficiencies will be identified, the echelon of maintenance determined, and an ERO initiated to show all corrective action to be taken per the reference.

PERFORMANCE STEPS:

- 1. Diagnose filter section malfunctions.
- 2. Diagnose piping system malfunctions.
- 3. Diagnose hypochlorinator malfunctions.
- 4. Diagnose slurry feeder malfunctions.
- 5. Document repair/replacement actions required.
- 6. Initiate EROSL, if parts are required.

REFERENCE(S):

- 1. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.9 PERFORM HYGIENE EQUIPMENT LTI

CONDITION(S): Provided a type of hygiene equipment, a suitable maintenance facility, required diagnostic tools, mechanic's tools, Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment (NAVMC 10560), and references.

STANDARD: The hygiene equipment limited technical inspection will be performed so that inspection will identify the maintenance status of the hygiene equipment, determine the proper echelon of maintenance, identify repair parts needed, and the Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment (NAVMC 10560) will be completed per the references.

PERFORMANCE STEPS:

- 1. Review the appropriate TM for the equipment being inspected.
- 2. Inspect the equipment.
- 3. Document the inspection on the Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment (NAVMC 10560).

REFERENCE(S):

- 1. TM 4700-15/1, Equipment Record Procedures
- 2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.10 REPAIR SHOWER FACILITY

CONDITION(S): Provided ERO, a shower facility which is to be repaired, an operable generator, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the references.

STANDARD: The shower facility will be repaired, the ERO will be documented properly showing repair actions taken, and the entire shower facility will be tested to verify proper operation per the references.

PERFORMANCE STEPS:

1. Repair water heater fuel pump malfunctions.
2. Repair water heater fuel burner system malfunctions.
3. Repair water pump/components malfunctions.
4. Repair temperature regulator valve malfunctions.
5. Repair water delivery/drain system malfunctions.
6. Document repair/replacement actions performed.

REFERENCE(S):

1. TM 10006A-14/P1, Shower Facility, Bare Base
2. TM 08444A-15/1, Operation and Overhaul Instructions

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.11 REPAIR LAUNDRY FACILITY

CONDITION(S): Provided ERO, a laundry facility which is to be repaired, an operable generator, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the references.

STANDARD: The laundry facility will be repaired, the ERO will be documented properly showing repair actions taken, and the entire laundry facility will be tested to verify proper operation per the references.

PERFORMANCE STEPS:

1. Repair air compressor malfunctions.
2. Repair water pump malfunctions.
3. Repair washer drive system malfunctions.
4. Repair extractor brake assembly malfunctions.
5. Repair water heater fuel burner system malfunctions.
6. Repair dryer tumbler fuel burner system malfunction.
7. Repair dryer tumbler air return box assembly malfunctions.
8. Document repair/replacement actions performed.

REFERENCE(S):

1. TM 01243E-14/1, Laundry Facility, Bare Base
2. TM 08444A-15/1, Operation and Overhaul Instructions

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.12 REPAIR REVERSE OSMOSIS WATER PURIFICATION UNIT

CONDITION(S): Provided ERO, a Reverse Osmosis Water Purification Unit which is to be repaired, an operable generator, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the references.

STANDARD: The Reverse Osmosis Water Purification Unit will be repaired, the ERO will be documented properly showing repair actions taken and the entire ROWPU will be tested to verify proper operation per the references.

PERFORMANCE STEPS:

1. Repair reverse osmosis element malfunctions.
2. Repair raw water, distribution and backwash pump malfunctions.
3. Repair reverse osmosis pump malfunctions.
4. Repair six way valve malfunctions.
5. Repair gauge malfunctions.
6. Repair unit filter/piping system malfunctions.
7. Repair chemical feed pump malfunctions.
8. Document repair/replacement actions performed.

REFERENCE(S):

1. TM 08580A-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Skid Mounted
2. TM 08580C-10/1, Water Purification Unit, Reverse Osmosis, 600 GPH, Trailer Mounted
3. TM 08580B-24/3
4. TM 08580A-24&P/2

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.13 REPAIR SIXCON WATER TANK/PUMP MODULE

CONDITION(S): Provided ERO, a SixCon water tank/pump module which is to be repaired, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the reference.

STANDARD: The SixCon water tank/pump module will be repaired, the ERO will be documented properly showing repair actions taken, and the entire SixCon water tank/pump module will be tested to verify proper operation per the reference.

PERFORMANCE STEPS:

1. Repair water drain valve assembly malfunctions.
2. Repair manhole cover assembly malfunctions.
3. Repair hose reel assembly malfunctions.
4. Document repair/replacement actions performed.

REFERENCE(S):

1. TM 08990A-15&P/1, SixCon Water Tank Module

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.14 REPAIR SMALL MOBILE WATER CHILLER

CONDITION(S): Provided ERO, a small mobile water chiller which is to be repaired, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the reference.

STANDARD: The small mobile water chiller will be repaired, the ERO will be documented properly showing repair actions taken, and the entire small mobile water chiller will be tested to verify proper operation per the reference.

PERFORMANCE STEPS:

1. Repair water pump assembly malfunctions.
2. Repair water valve malfunctions.
3. Repair accessory/pulley assembly malfunctions.
4. Document repair/replacement actions performed.

REFERENCE(S):

1. TM 5-4130-237-14, Small Mobile Water Chiller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.5.15 REPAIR 3000-LMT WATER PURIFICATION SYSTEM

CONDITION(S): Provided ERO, a 3000-LMT Water Purification System which is to be repaired, a suitable repair facility, applicable tools, necessary repair parts, needed supplies, and the reference.

STANDARD: The 3000-LMT Water Purification System will be repaired, the ERO will be documented properly showing repair actions taken, and the entire 3000-LMT Water Purification System will be tested to verify proper operation per the reference.

PERFORMANCE STEPS:

1. Repair filter section malfunctions.
2. Repair piping system malfunctions.
3. Repair hypochlorinator malfunctions.
4. Repair slurry feeder malfunctions.
5. Document repair/replacement actions performed.

REFERENCE(S):

1. TM 09777a-14/1, Water Purification Systems

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 6 - RECORDS, DOCUMENTS, AND PUBLICATIONS

TASK: 1171.6.1 COMPLETE CONSOLIDATED ENGINEER EQUIPMENT OPERATOR LOG AND SERVICE RECORD (NAVMC 10524)

CONDITION(S): Provided Consolidated Engineer Equipment Operator Log and Service Record, Motor Vehicle and Engineer Equipment Record Folder (NAVMC 696D), and the references.

STANDARD: The Consolidated Engineer Equipment Operator Log and Service Record will be completed so that the equipment descriptive data, scheduled preventive maintenance intervals, and hours of operation will be listed accurately and completely per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Complete Consolidated Engineer Equipment Operator Log and Service Record.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.6.2 COMPLETE ERO (NAVMC 10245)

CONDITION(S): Provided an ERO, references, and appropriate equipment technical manual(s).

STANDARD: The ERO will be completed so that all relevant sections of the ERO will be accurately completed per type of service performed and the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review proper section(s) of equipment technical manual to obtain maintenance information.
3. Complete ERO.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.6.3 COMPLETE EROSL (NAVMC 10925)

CONDITION(S): Provided an EROSL, references, and appropriate stock list(s).

STANDARD: The EROSL will be completed so that all relevant sections of the EROSL will be accurately completed per parts ordered and per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Review appropriate stock list(s) to obtain information.
3. Complete EROSL.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Stock Lists

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.6.4 COMPLETE MOTOR VEHICLE AND ENGINEER EQUIPMENT RECORD FOLDER (NAVMC 696D)

CONDITION(S): Provided a Motor Vehicle and Engineer Equipment Record Folder and the reference.

STANDARD: The Motor Vehicle and Engineer Equipment Record Folder will be completed so that the required entries will be made in appropriate section of the folder per equipment status and the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Complete Motor Vehicle and Engineer Equipment Record Folder.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.6.5 COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560)

CONDITION(S): Provided a Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment and the references.

STANDARD: The Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment will be completed so that all repairs, services, and materials utilized to complete the scheduled maintenance services will be accurately recorded per the references.

PERFORMANCE STEPS:

1. Review proper section(s) of the references.
2. Complete Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.6.6 ANALYZE DPR

CONDITION(S): Provided a DPR, ERO's, EROLS's, DTL's and the reference.

STANDARD: The DPR will be analyzed and reviewed so that all inaccuracies on DPR will be listed and submitted for correction per the reference.

PERFORMANCE STEPS:

1. Review proper section of the reference.
2. Review the DTL's, SASSY transactions, and EROSL's.
3. Compare the information reviewed in Step 2 with that listed on the DPR.
4. Compile a list of discrepancies.
5. Submit list of discrepancies for correction.

REFERENCE(S):

1. UM 4790-5, MIMMS (AIS) FMSS

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.6.7 ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561)

CONDITION(S): Provided a Preventive Maintenance Roster and the reference.

STANDARD: The Preventive Maintenance Roster will be analyzed so that all relevant sections will be accurate per type of service performed per the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Analyze Preventive Maintenance Roster.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1171.6.8 REVIEW INSPECTION TAG (NAVMC 1018)

CONDITION(S): Provided a completed inspection tag and the reference.

STANDARD: The inspection tag will be reviewed to ensure that the tag is filled out accurately and completely per the reference.

PERFORMANCE STEPS:

1. Review proper section of the reference.

Appendix F to
ENCLOSURE (6)

2. Review inspection tag.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix F to
ENCLOSURE (6)

MOS 1181, FABRIC REPAIR SPECIALIST

DUTY AREA 1 - EQUIPMENT SET UP

TASK: 1181.1.1 PREPARE TEXTILE/CLOTHING REPAIR SHOP FOR FIELD USE

CONDITION(S): Provided a trailer, tool box, one fully-equipped textile repair shop, access to an 1141 Electrician to wire up generator, if personnel are not trained to do so, and the references.

STANDARD: The performer will prepare textile repair shop for field use so that it will be level and sturdy, screws will be tight, and sewing machines will be operable per the references.

PERFORMANCE STEPS:

1. Unload the textile repair shop trailer.
2. Inventory textile/clothing repair shop/expendable supply.
3. Set up equipment in trailer to include the generator.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop
2. TM 10-3530-203-20, Operations Textile Manual

ADMINISTRATIVE INSTRUCTIONS:

1. 1141 Electrician may be required to wire up generator and motors.
-

DUTY AREA 2 - EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1181.2.1 OPERATE GROMMET/TAP AND DIE

CONDITION(S): Provided a cutter, grommet, tap, die, rawhide mallet, fabric, and the reference.

STANDARD: The grommet/tap and die will be operated so that the die size will match barrel size, the grommet barrel will be set face down on die, the top of tap will be hit hard enough to fasten grommet to fabric without damaging grommet or fabric, the end of grommet barrel will have a smooth roll, and the fabric surrounding the barrel will be smooth and tight but not buckled per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Operate grommet/tap & die.

REFERENCE(S):

1. FM 10-16, General Fabric Repair

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.2.2 OPERATE HEAVY-DUTY SEWING MACHINE

CONDITION(S): Provided a fully assembled heavy-duty sewing machine, thread spools, fabric, bobbin, scissors, needles, and the reference.

STANDARD: The heavy-duty sewing machine will be operated so that the correct needle size, thread color and weight will be selected, the machine will be threaded without missing thread points; the bobbin will be wound so that thread is evenly coiled and installed so that the thread unwinds clockwise, the fabric will be sewn without breaking or tangling the thread in the machine or fabric; and any unusual noise, excessive vibration, or worn or broken belts or pulleys will be reported per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Operate heavy-duty sewing machine.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.2.3 OPERATE LIGHT-DUTY SEWING MACHINE

CONDITION(S): Provided a fully assembled light-duty sewing machine, thread spools, fabric, bobbin, scissors, needles, and the reference.

STANDARD: The light-duty sewing machine will be operated so that the correct needle size, thread color and weight will be selected, the machine will be threaded without missing thread points; the bobbin will be wound so that thread is evenly coiled and installed so that the thread unwinds clockwise, the fabric will be sewn without breaking or tangling the thread in the machine or fabric; and any unusual noise, excessive vibration, or worn or broken belts or pulleys will be reported per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Operate light-duty sewing machine.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.2.4 OPERATE MEDIUM-DUTY SEWING MACHINE

CONDITION(S): Provided a fully assembled medium-duty sewing machine, thread spools, fabric, bobbin, scissors, needles, and the reference.

STANDARD: The medium-duty sewing machine will be operated so that the correct needle size, thread color and weight will be selected, the machine will be threaded without missing thread points; the bobbin will be wound so that thread is evenly coiled and installed so that the thread unwinds clockwise, the fabric will be sewn without breaking or tangling the thread in the machine or fabric; and any unusual noise, excessive vibration, or worn or broken belts or pulleys will be reported per the reference.

PERFORMANCE STEPS:

1. Review the reference.

2. Operate medium-duty sewing machine.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.2.5 OPERATE SNAP PRESS MACHINE

CONDITION(S): Provided a snap press machine, cap, post, socket, stud snap fasteners, and fabric.

STANDARD: The snap press machine will be operated so that the correct snap fastener parts will be inserted into snap press machine, the right side of material will be inserted under cap and stud, the snap press machine handles will be pressed hard enough into fabric so that snaps are securely attached but not so hard as to damage snap fasteners or fabric, the fabric surrounding snap fastener parts will be smooth and tight but not buckled, and the snap will snap correctly per the reference.

PERFORMANCE STEPS:

1. Insert snap fastener part into snap press material part.
2. Insert right side of material under cap and stud.
3. Press snap machine into fabric to attach snap.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop

ADMINISTRATIVE INSTRUCTIONS:

1. (NONE)
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DUTY AREA 3 - NON-EQUIPMENT OPERATIONAL PROCEDURES

TASK: 1181.3.1 INVENTORY TENTAGE/CANVAS REPAIR KIT

CONDITION(S): Provided a shop checklist form, EROSL, ERO, tentage/canvas repair kit with missing/unserviceable items, and references.

STANDARD: The tentage/canvas repair kit will be inventoried so that all missing/unserviceable items will be correctly identified and ordered per the references.

PERFORMANCE STEPS:

1. Check items in the kit against the shop checklist form and references.
2. Identify discrepancies.
3. Order new items.

REFERENCE(S):

1. FM 10-16, General Fabric Repair
2. SL-3-00403A, Components List for Repair Kit, Tentage

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.3.2 PERFORM FABRIC LTI

CONDITION(S): Provided chalk, tag, ink pen, fabric with defects, and the reference.

STANDARD: The fabric LTI will be performed so that all defects on fabric will be marked, fabric will be tagged, fabric will be correctly classified as repairable or salvageable, fabric will be folded, and salvageable fabric will be placed in designated area per the reference.

PERFORMANCE STEPS:

1. Mark all holes, rips, broken zippers, and other defects.
2. List defects on tag.
3. Classify fabric as repairable or salvageable.
4. Attach tag to fabric.
5. Fold repairable fabric and place in designated area.
6. Fold salvageable fabric and place in designated area.

REFERENCE(S):

1. FM 10-16, General Fabric Repair

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.3.3 REMOVE SALVAGEABLE PARTS FROM UNSERVICEABLE FABRIC

CONDITION(S): Provided unserviceable fabric, shears, and knife.

STANDARD: The salvageable parts from unserviceable fabric will be removed and correctly stored in designated area.

PERFORMANCE STEPS:

1. Remove all hardware that is not bent, rusty, or broken from fabric.
2. Store salvageable hardware in designated area.

REFERENCE(S): None.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 4 - PREVENTIVE MAINTENANCE

TASK: 1181.4.1 PERFORM SEWING MACHINE PREVENTIVE MAINTENANCE

CONDITION(S): Provided a heavy-duty, a light-duty, or a medium-duty sewing machine, screwdriver, wrench set, pliers, machine oil, sash brush, cleaning rags, thread, needle, and references.

STANDARD: The sewing machine preventive maintenance will be performed so that bent, broken, worn, or missing machine parts will be replaced, if authorized; reported to supervisor if not, loose machine parts will be tightened, all machine points will be lubricated, and the machine will operate without noise or excessive vibration per the references.

PERFORMANCE STEPS:

1. Review preventive maintenance sections of the references.
2. Perform sewing machine preventive maintenance.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop
2. TM 10-3530-203-24, Organizational and Maintenance Manual, Textile Repair Shop

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 5 - CORRECTIVE MAINTENANCE

TASK: 1181.5.1 REPAIR SEWING MACHINE

CONDITION(S): Provided a heavy-duty, a light-duty, or a medium-duty sewing machine, Phillips and flat-tip screwdriver set, sash brush, machine oil, ERO, and references.

STANDARD: The performer will repair the sewing machine so that the faults will be isolated, all malfunctions will be adjusted, if authorized to do so, otherwise, malfunctions will be recorded on ERO and reported to supervisor per the references.

PERFORMANCE STEPS:

1. Review the references.
2. Troubleshoot the sewing machine.
3. Repair sewing machine as authorized.
4. Record maintenance performed.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop
2. TM 10-3530-203-24, Organizational and Maintenance Manual, Textile Repair Shop

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.2 REPAIR CLOTHING/TEXTILE EQUIPMENT

CONDITION(S): Provided a sewing machine, canvas equipment with a hole, tear, or rip, shears, chalk, ruler, treated canvas, and references.

STANDARD: The clothing/textile equipment will be repaired so that the material will cover the damaged area two inches on all sides and the damaged area will be cut away one inch from inner stitch row per the references.

PERFORMANCE STEPS:

1. Cut away damaged area.
2. Cut and prepare material as required.
3. Position and sew material.

REFERENCE(S):

1. FM 10-16, General Fabric Repair
2. TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.3 REPAIR ALICE PACK COMPONENTS

CONDITION(S): Provided an ALICE pack, knife, shears, sewing machine, one inch webbing, D ring, double bar tongueless buckle, and the reference.

STANDARD: The ALICE pack be repaired so that all components meet the requirements of the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Replace ALICE pack strap.
3. Replace ALICE pack ring.
4. Replace ALICE pack buckle.

REFERENCE(S):

1. TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.4 REPAIR BODY ARMOR/FLACK JACKET

CONDITION(S): Provided a body armor/flack jacket, one inch webbing, one to four straps, knife, snaps, snap machine, thread, Velcro, shears, and a heavy-duty sewing machine.

STANDARD: The body armor/flack jacket will be repaired so that it is returned to serviceable condition.

PERFORMANCE STEPS:

1. Measure webbing.
2. Repair body armor/flack jacket.

REFERENCE(S): None.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.5 REPAIR TENT

CONDITION(S): Provided a heavy-duty sewing machine, shears, tent, and the reference.

STANDARD: The tent will be repaired so that it is sewn to serviceable condition per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Repair the tent.

REFERENCE(S):

1. FM 10-16, General Fabric Repair

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.6 REPLACE CAB COVER WINDOW

CONDITION(S): Provided a heavy-duty sewing machine, shears, textile tape, tape measure, windowless cab, and plastic sheet.

STANDARD: The cab cover window will be replaced so that it will be stitched with two stitch rows that allow no bubbles and cover entire window, and all rough edges of new window will be aligned and covered with textile tape.

PERFORMANCE STEPS:

1. Measure window.
2. Cut plastic sheet to fit window.
3. Cover rough edges of sheet and window frame with textile tape.

REFERENCE(S): None.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.7 REPAIR/REPLACE ZIPPER/ZIPPER HEAD

CONDITION(S): Provided the appropriate sewing machine, knife, scissors, pliers, zipper/zipper head to repair, replacement zipper/zipper head, and the references.

STANDARD: The equipment's zipper or zipper head will be removed and replaced as required, installing the correct length of zipper to include tacking and stops so that it will function as if it were original equipment.

PERFORMANCE STEPS:

1. Repair sleeping bag zipper or zipper head.
2. Replace sleeping bag zipper or zipper head.
3. Repair tent zipper or zipper head.

- 4. Replace tent zipper or zipper head.
- 5. Repair CVC jacket/suit zipper or zipper head.
- 6. Replace CVC jacket/suit zipper or zipper head.

REFERENCE(S):

- 1. FM 10-16, General Fabric Repair
- 2. TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.8 REPAIR CANVAS COVER/COMPONENTS

CONDITION(S): Provided a heavy-duty sewing machine, materials, shears, knife, and the reference.

STANDARD: The canvas cover/components will be repaired so that it is returned to a serviceable condition per the reference.

PERFORMANCE STEPS:

- 1. Review the reference.
- 2. Repair canvas cover/components.

REFERENCE(S):

- 1. FM 10-16, General Fabric Repair

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.9 REPAIR SLEEPING BAG

CONDITION(S): Provided a medium-duty sewing machine, sleeping bag, knife, shears, and materials.

STANDARD: The sleeping bag will be repaired so that it is returned to a serviceable condition.

PERFORMANCE STEPS:

- 1. Construct a tie.
- 2. Tack tie to sleeping bag.

REFERENCE(S): TM 10-8400-201-23, General Repair Procedures For Clothing and Individual Equipment.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.10 REPLACE TEXTILE EQUIPMENT SNAP

CONDITION(S): Provided a snap press machine, cap, post, socket, stud snap fasteners, textile equipment, and the reference.

STANDARD: The performer will replace textile equipment snap so that the cap and snap will be secured to the material and the snap will snap per the reference.

PERFORMANCE STEPS:

1. Review the reference.
2. Replace textile equipment snap.

REFERENCE(S):

1. FM 10-16, General Fabric Repair

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.5.11 REPLACE VEHICLE SEAT COVER

CONDITION(S): Provided treated canvas, pattern, shears, staples, staple gun, heavy-duty sewing machine, chalk, tape measure, and foam.

STANDARD: The vehicle seat cover will be replaced so that no wrinkles will appear in the seat cover, seat cover corners will be tight, there will be enough staples to hold the material, and seat cover will have a hem underneath on all sides.

PERFORMANCE STEPS:

1. Remove damaged seat cover.
2. Remove damaged foam.
3. Cut out new seat cover using pattern provided from original seat.
4. Cut out new foam using pattern provided from the original seat.
5. Place foam on seat.
6. Place new seat cover over foam.
7. Staple cover to seat bottom.

REFERENCE(S): None.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 6 - RECORDS, DOCUMENTS, AND PUBLICATIONS

TASK: 1181.6.1 COMPLETE/REVIEW DPR

CONDITION(S): Provided a DPR, several ERO's, and the reference.

STANDARD: The DPR will be completed and reviewed so that all sections of the report are filled out accurately and completely and the status of each piece of equipment is listed per information provided on ERO per the reference.

PERFORMANCE STEPS:

1. Review proper section of the reference.
2. Complete DPR.
3. Review DPR.

REFERENCE(S):

1. UM 4790-5, MIMMS (AIS) FMSS

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.6.2 COMPLETE ERO (NAVMC 10245)

CONDITION(S): Provided an ERO and references.

STANDARD: The ERO will be completed so that all relevant sections of the ERO will be completed per the references.

PERFORMANCE STEPS:

1. Review appropriate section(s) of the references.
2. Complete ERO.
3. Review ERO for accuracy.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.6.3 COMPLETE EROSL (NAVMC 10925)

CONDITION(S): Provided an EROSL and references.

STANDARD: The EROSL will be completed so that all relevant sections will be accurately completed per parts ordered and the references.

PERFORMANCE STEPS:

1. Review appropriate section(s) of the references.
2. Review appropriate stock list(s) to obtain information.
3. Complete EROSL.
4. Review EROSL for accuracy.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. UM 4790-5, MIMMS (AIS) FMSS
3. Appropriate Stock Lists

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.6.4 COMPLETE DISPOSAL FORM (DD 1348-1)

CONDITION(S): Provided a Disposal Form, several ERO's, and references.

STANDARD: The Disposal Form will be completed so that all sections of the form will be filled out accurately and completely and the condition code of each piece of equipment will be listed per information provided on the ERO per the references.

PERFORMANCE STEPS:

1. Review appropriate section(s) of the references.
2. Complete the Disposal Form.

REFERENCE(S):

1. UM 4400-124, FMF SASSY Using Unit Procedures
2. MCO P4400.82F, MIMMS Control Item Management Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.6.5 COMPLETE WORKSHEET FOR QUARTERLY PREVENTIVE MAINTENANCE AND TECHNICAL INSPECTION FOR ENGINEER EQUIPMENT (NAVMC 10560)

CONDITION(S): Provided a Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment and the references.

STANDARD: The Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment will be completed so that all repairs, services and materials utilized to complete the scheduled maintenance services will be accurately recorded on the worksheet per the references.

PERFORMANCE STEPS:

1. Review appropriate section(s) of the references.
2. Complete Worksheet for Quarterly Preventive Maintenance and Technical Inspection for Engineer Equipment.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.6.6 ANALYZE PREVENTIVE MAINTENANCE ROSTER (NAVMC 10561)

CONDITION(S): Provided a Preventive Maintenance Roster and the reference.

STANDARD: The Preventive Maintenance Roster will be analyzed so that all relevant sections will be accurate per type of service performed per the reference.

PERFORMANCE STEPS:

1. Review proper section(s) of the reference.
2. Review proper section(s) of equipment TM to obtain maintenance information.
3. Analyze Preventive Maintenance Roster.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.6.7 REVIEW INSPECTION TAG (NAVMC 1018)

CONDITION(S): Provided a completed inspection tag and the reference.

STANDARD: The inspection tag will be reviewed to ensure that the tag is filled out accurately and completely per the reference.

PERFORMANCE STEPS:

1. Review proper section of the reference.
2. Review inspection tag.

REFERENCE(S):

1. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 7 - PROGRAMS MANAGEMENT

TASK: 1181.7.1 PREPARE FABRIC REPAIR SHOP MASTER WORK SCHEDULES

CONDITION(S): Provided writing paper, pen, chart, and list of personnel.

STANDARD: The fabric repair shop master work schedules will be prepared so that the list or chart will include all personnel and enough personnel will be scheduled to meet repair work load at a given time of day.

PERFORMANCE STEPS:

1. Determine number of personnel required each day to meet repair workload.
2. List on paper or chart.
3. Post paper or chart in designated area.

REFERENCE(S): None.

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.7.2 SUPERVISE FABRIC REPAIRS

CONDITION(S): Provided personnel who are repairing fabric and references.

STANDARD: The fabric repairs will be supervised so that all fabric repair errors will be identified and will provide technical guidance to repairmen to correct fabric repair errors per the references.

PERFORMANCE STEPS:

1. Review proper sections of the references.
2. Observe personnel performing fabric repairs.
3. Correct fabric repair errors using above references for guidance.

REFERENCE(S):

1. TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment
2. FM 10-16, General Fabric Repair

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.7.3 SUPERVISE SHOP RECEIVING, CLASSIFICATION, AND REPAIR OPERATIONS

CONDITION(S): Provided an ERO, inspection tag, EROSL, DPR, fabric that has been received, classified and repaired, and references.

STANDARD: The shop receiving, classification and repair area operations will be supervised so that all errors found in processing of ERO forms, completion of inspection tag, EROSL, DPR, LTI of fabric, and fabric repair will be identified and corrected per the references.

PERFORMANCE STEPS:

1. Review proper sections of the references.
2. Identify errors in receiving, classification, and repair of fabric.
3. Provide guidance to repair personnel in order to correct errors.

REFERENCE(S):

1. FM 10-16, General Fabric Repair
2. TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment
3. TM 4700-15/1, Equipment Record Procedures
4. MCO P4790.2C, MIMMS Field Procedures Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.7.4 ENFORCE QUALITY CONTROL STANDARDS

CONDITION(S): Provided board, grease pencil, canvas/textile equipment/fabric that has been marked and repaired, and references.

STANDARD: The quality control standards will be enforced so that the canvas/textile equipment/fabric will be correctly located by using the board and errors made by personnel in tagging, marking and repairing canvas/textile equipment will be identified for corrective action per the references.

PERFORMANCE STEPS:

1. Review proper sections of the references.
2. Locate equipment/fabric in the repair process.
3. Inspect equipment/fabric against inspection tags.

4. Ensure that personnel correct equipment/fabric tagging and marking errors.
5. Inspect equipment/fabric repairs.
6. Ensure that personnel correct faulty equipment/fabric repairs.

REFERENCE(S):

1. TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment
2. FM 10-16, General Fabric Repair

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.7.5 SUPERVISE EQUIPMENT OPERATION

CONDITION(S): Provided personnel who are operating equipment and the reference.

STANDARD: The equipment operation will be supervised so that any equipment operation errors will be identified and will provide technical guidance to operators to correct equipment operation errors per the reference.

PERFORMANCE STEPS:

1. Review proper sections of the reference.
2. Observe personnel operating shop equipment.
3. Correct equipment operation errors.

REFERENCE(S):

1. TM 10-3530-203-10, Operations Manual, Clothing/Textile Repair Shop

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 1181.7.6 ANALYZE DPR

CONDITION(S): Provided a DPR, several ERO's, and the references.

STANDARD: The DPR will be analyzed to ensure that all sections of the report are filled out accurately and completely and the status of each piece of equipment is listed per information provided on ERO per the references.

PERFORMANCE STEPS:

1. Review proper section of the references.
2. Review DPR.
3. Review the DTL's, SASSY transactions, and EROSL's.
4. Compare the information reviewed in Step 3 with that listed on the DPR.
5. Compile a list of discrepancies.
6. Submit list of discrepancies for correction.

REFERENCE(S):

1. UM 4790-5, MIMMS (AIS) FMSS
2. Appropriate Equipment Technical Manuals

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix G to
ENCLOSURE (6)